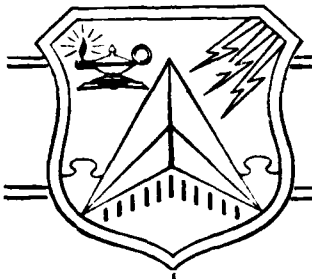

Air War College

AIR WAR COLLEGE CLASS OF 1981

RETENTION SURVEY

RESEARCH REPORT

No. MS108-81 **By** Robert E. Lee, Jr.

AIR WAR COLLEGE
AIR UNIVERSITY (ATC)
UNITED STATES AIR FORCE
MAXWELL AIR FORCE BASE, ALABAMA

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AIR WAR COLLEGE
AIR UNIVERSITY

REPORT NO. MS108-81

AIR WAR COLLEGE
CLASS OF 1981
RETENTION SURVEY,

by

Robert E. Lee, Jr.
[redacted]
Lieutenant Colonel, USAF

A RESEARCH REPORT, SUBMITTED TO THE FACULTY

IN

FULFILLMENT OF THE RESEARCH

REQUIREMENTS

MAXWELL AIR FORCE BASE, ALABAMA

April 1981

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AIR WAR COLLEGE RESEARCH REPORT SUMMARY
NO. MS108-81

TITLE: Air War College Class of 1981 Retention Survey

AUTHOR: Robert E. Lee, Jr., Lieutenant Colonel, USAF

This study reports the results of a retention survey administered by the author to the active-duty Air Force members of the Air War College class of 1981. The purposes of the survey were to assess the career and retention attitudes of the class of 1981, determine the factors shaping those attitudes, and compare the results obtained with those from a similar survey administered to the Air War College class of 1980. The 1981 survey focused on various factors which affect retention, including financial matters, family considerations, leadership, and social life/camaraderie. It also sought to determine the career intentions of the class of 1981. The results of the 1981 survey were in many respects better from an organizational viewpoint than were the results of the 1980 survey. The analysis of the results also revealed that the retention outlook among high-quality senior officers is positive and healthy.

BIOGRAPHICAL SKETCH

Lieutenant Colonel Robert E. Lee, Jr., (M.B.A., American University) has served in several key personnel positions since his commissioning in 1963. These include Consolidated Base Personnel Office (CBPO) Chief; officer assignments in Headquarters Air Training Command; executive officer to the Assistant for Colonel Assignments in the Deputy Chief of Staff/ Manpower and Personnel in the Pentagon; and, most recently, as chief, Personnel Evaluation Divison, Air Force Manpower and Personnel Center, where he managed the Air Force officer effectiveness report (OER) and airman performance report (APR) systems. Lieutenant Colonel Lee is a graduate of the Air War College, class of 1981.

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CHAPTER I

INTRODUCTION

In January, 1980, Lieutenant Colonel Kenneth A. Anderson, USAF, a member of the Air War College (AWC) class of 1980, developed a retention survey and administered it to his active-duty Air Force classmates. According to Anderson, the purposes of the survey were "to determine the severity of the retention problem and help identify causes." (1:1)

The survey results provided a wealth of data for analysis, and some of the information was, as Anderson termed it, "rather dramatic." (1:2) Major findings included but were not limited to the following:

> Inadequate pay, family related considerations and eroding benefits are the most negative factors in making the Air Force a career.
> Over 90 percent of the class feel that retention is a very serious problem for the Air Force.
> Over two-thirds of the class feel that Air Force senior leadership is not taking positive and effective actions to improve the quality of life in the Air Force.
> There is a clear trend toward shorter careers within the class.
> There are excellent motivational factors for making the Air Force a career--job challenge and satisfaction, service to the country and association with great people. These motivators are losing effect, however, since basic needs are being challenged because of inadequate pay and benefits. In addition, social changes dictate recognition of family needs. Instability, disruptions and separations must be reduced. (1:2-4)

Acknowledging that the survey results were not encouraging, Anderson concluded that:

> Retention problems within any specialized group cause concern. Significant losses of highly experienced and

> promotable senior officers are unacceptable if the Air Force is to support effectively national goals and objectives. No organization with a closed personnel system can continue as a viable institution under those circumstances. If personnel selected and trained to assume senior leadership positions do not remain within the organization, that loss is irreplaceable The concerns, attitudes and intentions expressed by the Air War College class of 1980 offer a sobering analysis of where the Air Force stands as an institution today. (1:34-35)

Sobering, indeed! By any reasonable measure, the typical Air War College class is an aggregate of the Air Force's finest lieutenant colonels and colonels--the vanguard of the Air Force leadership for the decade following graduation. And as Anderson noted, it was "reasonable to extrapolate the survey data as representative of the top 10 percent of lieutenant colonels in the Air Force" (1:31)--a group numbering approximately 1600 compared to the 139 Air Force members of the class of 1980. Obviously, in January 1980 the retention outlook for the best Air Force officers at the mid-senior level was less than optimistic.

In his report Anderson recommended that the same survey be administered to subsequent AWC classes. (1:32) The AWC faculty agreed with that recommendation and decided that an annual retention survey of AWC students should be conducted as a part of student research. This study accomplishes that task for the AWC class of 1981.

The 1981 survey retained Anderson's basic framework of questions and included some new ones designed to accommodate the following factors:

1. The need to investigate more thoroughly the 1980 findings regarding pay and benefits

2. The 11.7 percent pay increase which was effective on 1 October 1980

3. The 1980 presidential election

4. The introduction of a sixth analytical category--social life/camaraderie

The net effect of the changes to the survey instrument was to increase the number of questions from 53 to 75. The added depth provided additional information regarding several factors considered key to a healthy retention climate. Moreover, the results of the 1981 survey were in many respects better from an organizational viewpoint than those from the 1980 survey. These 1981 results are summarized below.

1. According to the class of 1981, the three most positive aspects of an Air Force career are the job (principally job satisfaction), the people in the Air Force, and service to the nation

2. Financial compensation is still the most significant concern for this group. There was a slight improvement in attitude toward pay compared with 1980, but much ground needs to be covered before an adequate pay level is reached

3. There is a very high, positive relationship between longer careers and families who are satisfied with the Air Force way of life

4. A social/camaraderie category was added this year. The answer to the questions it contained indicated that negative

trends in the social/camaraderie aspects of Air Force life are contributing to the Air Force's retention difficulties. Concern in this area was most frequently expressed by rated officers who have spent most of their careers in flying jobs where mission, unit cohesiveness, and a strong social tradition provide a great deal of individual satisfaction, esprit and camaraderie

5. The most positive changes from 1980 to 1981 were the improved opinions about Air Force leadership. The animosity present in 1980 diminished significantly. The only major dissatisfaction remaining in this category among the class of 1981 is the strong perception that there is too much micromanagement in the Air Force

6. The 1981 class is acutely aware of the Air Force's retention problems, and they reported considerable difficulty in motivating NCOs and young officers toward making the Air Force a career. The class also agreed that there was a senior officer retention problem, but they were unwilling to sacrifice healthy promotion flow in order to fix it

7. The career intentions of the class of 1981 are positive and healthy. This observation results from additional data used for comparative purposes as well as to a difference in viewpoints between analysts (last year's and this year's)

8. Finally, retention was the single most important issue facing the Air Force today, according to the class of 1981

The 1981 survey annotated with the response percentages for both the 1980 and 1981 classes is provided at appendix A. The remainder of this study will focus on a detailed analysis of the survey results.

CHAPTER II

THE SURVEY

Purpose of the Survey

The purposes of the 1981 survey were to assess the career and retention attitudes of the Air Force members of the AWC class of 1981, determine the factors shaping those attitudes, and compare the results obtained with those reported in the Anderson study.

Hypothesis

Anderson's hypothesis was that "current retention problems are symptoms of much more serious institutional problems in the Air Force." (1:5) While this may be correct, it seems to be beyond the capability of a survey of Air Force AWC students to prove or disprove such an hypothesis.* At best, the most reasonable generalization which could have been reached from the 1980 survey was that the career attitudes of the Air Force members of the AWC class of 1980 were quite similar to those of a group of officers of like rank and quality. This is precisely what Anderson concluded--that the survey was representative only of the top 10 percent of lieutenant colonels and colonels in the Air Force. (1:31)

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*Anderson acknowledged this limitation by stating that his "sample was small and not representative of all Air Force officers or all Air Force colonels and lieutenant colonels." (1:1)

The purpose of this discussion is to narrow the focus of the retention survey to an assessment of how the Air Force's best lieutenant colonels and colonels feel about their careers--nothing more, nothing less. This attempt at a more precise focus is based on the premise that the knowledge gained from the 1980, 1981, and subsequent surveys will aid in rounding out what the Air Force needs to know about the root causes of dissatisfaction--as well as satisfaction--regarding an Air Force career.

In summary, the most appropriate hypothesis to be derived from the 1981 survey would seem to involve some prediction of change utilizing the 1980 results as a baseline. Therefore, the statistical null hypothesis is that there is no difference between the two groups. Rejection of the statistical hypothesis supports the thesis that the class of 1981 has a much more positive outlook than did the class of 1980.

Survey Methodology

The 1981 survey is basically the same as the 1980 version. It consists of seven categories of questions: demographics, financial considerations, family considerations, social life/ camaraderie, leadership, retention, career intentions, and miscellaneous. The 1981 version totals 75 questions, an increase of 22 questions from the previous year. Many of the new questions were included to probe more deeply into the finding that pay was the most serious concern of the AWC class of 1980.

The following Likert-type response scale was used for most questions: strongly agree, agree, disagree, strongly disagree. Note that it does not include a neutral, mid-point response. Anderson's reasoning for this format was that it "provided a common ground of comparison and correlation and forced a choice by each respondent." (1:6) This format was continued in the current survey for consistency purposes.

A total of 144 copies of the 1981 survey were distributed, and 140 (97.2 percent) were returned by the end of the two-week completion period. This compares favorably with the 1980 return rate of 87.8 percent (122 of 139).

The 1980 and 1981 surveys were distributed in January of the academic year. Anderson described this period as one where the mood of his fellow students was at a mid-to-high point. This assessment is also valid for the class of 1981.

Analytical Methodology

With the exception of the last four questions, which required fill-in-the-blank answers, respondents answered the survey on machine-scannable answer sheets to facilitate scoring of the results. Frequency-response-distribution percentages were computed for each question, with adjustments being made for instances in which no answer was marked and respondents who were single or had no children were instructed not to answer certain questions. Thus, only valid answers were used in calculating the distribution percentages. For some unexplainable

reason, this procedure was not used for the 1980 survey; rather, the distribution percentages were apparently calculated on the basis of the number of total respondents rather than the number of valid answers.* This error necessitated the recalculation of the 1980 response distribution percentages so that valid t-tests could be conducted on each question which appeared in both the 1980 and 1981 surveys. In almost every case these recalculations resulted in only slight adjustments to the response percentages, usually less than .1 or .2 percent. All 1908 percentages which appear in this paper are recalculations.

Statistical Tests**

The Statistical Package for the Social Sciences (SPSS) computer program was used for all statistical analyses. Two SPSS subprograms were selected, t-test and crosstabs. The t-test determines whether or not a difference between two samples indicates a difference in the populations from which those samples are drawn. In this survey analysis the samples are the Air Force officers in the Air War College classes of 1908 and 1981, and the underlying populations are the top 10 percent of colonels and lieutenant colonels throughout the Air Force for those two years. Each classes' responses to each survey question are compared, and the t-test estimates the

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*Computer personnel believe this may have been caused by an inconsistency in response coding procedures which Anderson was not aware of.

**Individuals without a background in statistical analysis should read this portion carefully.

probability that any differences are due solely to chance. The probability estimates are formed by hypothesizing that there will be no difference of opinion between the two classes and then proceeding to prove or disprove the hypothesis on a question-by-question basis. When a large difference of opinion is found on a particular question, the difference is termed "significant,"* and the hypothesis (that there is no difference) is rejected. The conclusion can therefore be made that there is a difference of opinion between the underlying populations.

There is always the possibility of making errors in this type of statistical testing. One such error (Type I error) is to decide that a difference of opinion exists in the two populations when, in reality, it does not. The key to successful analysis is to reduce the risk of making this error by specifying at the beginning of the test the maximum acceptable risk of error which can be tolerated. This is generally referred to as the "level of significance."

The level of significance (acceptable risk of a Type I error) normally depends on how serious the consequences would be if an error were made. If the consequences were extremely serious, the significance level would probably be specified at .01, i.e., no more than a 1 percent chance of error. On the other hand, less serious consequences might result in a significance level

*Significant, in its statistical sense, does not mean "important." Rather it signifies that a true difference exists between the samples.

of .05--as much as a 5 percent chance of an error is acceptable. These risk statements can also be expressed as confidence levels, i.e., a 99 or 95 percent confidence that the right decision was made in rejecting the hypothesis.

A second kind of error (Type II error) occurred when one accepts a false hypothesis. For example, a difference may exist between two groups but the statistical test does not indicate such a difference. An analysis of the probability of Type II errors is beyond the scope of this report.

The t-test significance level for this study was established at the .05 level, a level considered customary for statistical testing. To again emphasize, when a difference of opinion between the two classes is termed statistically "significant," it only means that we can be 95 percent confident that the same difference of opinion exists between the basic populations.

Of the 42 questions common to both surveys, 15 indicated statistical significance at the .05 level as a result of the SPSS t-test. Therefore, we can be 95 percent confident that in these 15 instances the opinions of the 1981 population differed mardedly from the opinions held by the 1980 population. For the other 27 questions common to both surveys, we had less than a 95 percent confidence that the opinions of the two populations reflected "true" differences. Appendix B contains the result of the SPSS t-tests to assist in making this decision. The column labeled "2-tail Prob." under the heading "Separate Variance Estimate" reflects the calculated level of significance (probability of error) for each question common to both surveys.

The SPSS Crosstabs subprogram examines the relationship between two independent variables, such as the response distributions of any two questions which appeared in the 1981 survey. The principal statistic in the Crosstabs subprogram is chi-square, a test of statistical significance which determines the probability that a systematic (dependent) relationship exists between two variables (question responses).

The procedure begins with an hypothesis that the two sample variables (questions) being compared are independent. The chi-square equation then computes the differences between the theoretical distributions which would be expected if the variables were independent and the distributions which actually appeared in the sample. If the total difference is large, then a systematic relationship probably exists and the hypothesis can be rejected.

Like the t-test, chi-square utilizes levels of significance to minimize the risk of concluding that the relationship is systematic when in fact it is not. Generally, the chi-square significance level is set at .05. When chi-square indicates that a relationship between two sample variables is statistically "significant" at the .05 level, this means that we can be at least 95 percent confident that the variables (question responses) are related to one another in some fashion.

While a chi-square test helps determine dependency between two variables, it is incapable of describing how strong the dependency might be. A description of strength is important

because while there may be high confidence that the variables are dependent, the relationship in the sample may be very weak. The reverse is also possible. The sample relationship may be strong, but there is less than 95 percent confidence that the variables are truly dependent.

This latter point is important to the analysis of the 1981 survey. There are a few instances in which a strong relationship is indicated between two sample variables (questions), but chi-square provides less than 95 percent confidence that the variables are dependent. Given the unique nature of this survey, it seems inappropriate to exclude these few cases from the analysis; therefore, they will be utilized to offer added insight.

The SPSS Crosstabs subprogram offers a number of statistics which describe strength of relationship; the choice depends on whether the variables are measured at the nominal or ordinal level. Since a Likert response scale is considered to be at least ordinal, Crosstabs statistics which can be employed are tau (b or c), gamma, and Sommers D. Gamma was selected for use in this analysis. The possible values of gamma range linearly from -1 to +1 with 0 indicating no strength in the relationship.* A positive sign indicates, for example, that respondents who marked a particular response on

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*According to an example in the SPSS text, a .34 (+ or -) represented a fairly strong relationship. (7:228)

one question tended to mark the same answer on the other question (A-A, D-D, etc.). On the other hand, a negative sign indicates that respondents who marked a particular response on one question tended to mark an opposing answer on the other question (A-D, D-A, etc.).

Statistical Highlights

The following summary highlights some of the results of the chi-square and gamma statistics from the 1981 survey:

1. Six demographic factors* were crosstabulated with 48 other survey questions for a total of 348 demographic crosstabs

   a. 37 (10.6%) were statistically significant at the .05 level

   b. An additional 22 (6.3%) would have been statistically significant if the .10 level had been established as the cutoff point

   c. 27 (7.8%) had a gamma value in the ranges -1 to -.30 or +.30 to +1, considered fairly strong to strong relationships

2. Thirty question-to-question (non-demographic) crosstabulations were conducted to test for suspected relationships or response consistency

   a. 24 were statistically significant at the .05 level

   b. 2 others would have been statistically significant if the .10 level had been established as the cutoff point

   c. 22 had a gamma value in the ranges -1 to -.30 or +.30 to +1 and were thus considered to have fairly strong to strong relationships

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*Question 176, Date of Rank, was not crosstabulated.

Other Questions

The last four questions in the 1981 survey were fill-in-the-blank. One question asked respondents to estimate the quantity of a pay raise necessary to retain senior officers till they near mandatory retirement. Two questions asked each respondent to list the three most positive and negative factors in an Air Force career, and the last question asked what was the most significant problem facing the Air Force. The pay-raise data was manually compiled, and mean, median, and mode were computed. The responses on the positive and negative factors and the most significant problem were manually extracted and grouped according to topic. There were 18 positive topics, 21 negative topics, and six significant problem topics. Final rank ordering of the positive and negative topics was accomplished by awarding points based on order of placement on each individual survey. A number one factor received three points; a number two factor, two points; and a number three factor, one point. The responses to these four questions are examined in considerably greater detail in Chapters VII and IX.

Review of Chapter Analyses

The 75 questions in the 1981 survey have been grouped into seven categories for analytical purposes. These categories are:

1. Financial Considerations
2. Family Considerations
3. Social Life/Camaraderie
4. Leadership
5. Retention
6. Career Intentions
7. Miscellaneous Questions

The response distributions to each question have been combined into positive and negative percentages to facilitate analysis. The positive percentage represents a combination of the strongly agree and agree percentages, and the negative percentage represents a combination of the two disagree responses. The response distributions from 1981 are compared to the response distributions from 1980, and statistically significant relationships are highlighted. Statistical relationships among 1981 questions are then discussed. The primary purpose is to analyze fully each category separately. The following terms will be used for the demographic crosstabulations:

1. Grade: colonel, lieutenant colonel, etc. (In the crosstabs printouts, Response A includes colonels and colonel selectees; Response C indicates lieutenant colonels.)

2. Age (self-explanatory)

3. Time in Service: used in lieu of "Years of Service for Retirement," which appears in the crosstabs printout

4. PLSD: used in lieu of "Commissioning Year," which appears in crosstabs printout. (PLSD means Promotion List Service Date and for this group means essentially the same as commissioning year.)

5. Aeronautical Rating (self-explanatory)

6. Source of Commission (self-explanatory)

Before evaluation of the first category, a warning is necessary. In studying surveys of this nature, one has a natural tendency to spend more time looking at what is wrong rather than what is right. This problem is further compounded because respondents frequently recognize the potential power of the survey results and bias their responses in favor of a particular outcome. The reader should keep this fact in mind when considering the results of the 1981 survey and, for that matter, the 1980 survey, too. In both cases it is probably reasonable to assume that the attitudes of both groups are slightly more positive across the board, than they appear in the survey results.

CHAPTER III

FINANCIAL CONSIDERATIONS

Response Analysis

> Let's face it--money talks! It talks because of what it can do for us within our social parameters. And it is naive for anyone to believe money talks less to military men and women than it does to civilians. It manifests free enterprise! I say it is not wrong for those dedicated to defend our country and all that it offers to expect a fair share of the profits according to demonstrated ability, initiative and degree/level of responsibility. (11:2)

This quote, excerpted from a 1973 letter written by an Air Force colonel selectee to the Assistant for Colonel Assignments, eloquently sums up how many of the members of the AWC class of 1980 probably felt about their own Air Force pay and allowances. In many respects it also represents the collective opinion of the class of 1981 toward their military compensation. For despite the October 1980 11.7 percent pay increase, and the new variable housing allowance, a considerable amount of concern and disgruntlement still exists among top-quality senior officers toward current compensation levels.

Numerous examples of concern are evident in the 1981 survey results. More than 66 percent of the class of 1981 personally viewed the October 1980 pay and allowance increases as less than adequate. More than 16 percent viewed the increases as far less than adequate. Ninety percent of the 1981 class said their pay and benefits compensation is inadequate

given the inherent risks and hardships of an Air Force career. Exactly the same percentage of the 1980 class felt the same way. Eighty-two percent of the 1981 class reported that it was hard to save money on their Air Force income, and over 86 percent indicated varying degrees of concern about making financial ends meet (32 percent "sometimes" concerned, 31 percent "usually" concerned, and 24 percent "always" concerned).

Two responses in this category reflected statistical significance between the opinions of the two classes. First, the percentage who believe they receive appropriate increases in benefits and privileges with each promotion rose from approximately 28 percent in 1980 to 46 percent in 1981. In the second area of significance, 90 percent of the 1981 class believe full dental care would be a valuable retention incentive. This percentage was over 5 percentage points higher than in 1980. The statistical significance is attributed to the much higher percentage of "strongly agree" answers in 1981--50 percent versus only 34 percent in 1980.

Three questions addressed the benefits issues. Approximately 94 percent of the 1981 class said that benefits are not as attractive as they once were. This percentage was down just over 3 percentage points from the previous year. In the medical area 63 percent in 1981 believed medical care to be a major benefit. This percentage was 5 percent lower than in 1980. On the other hand, only 38 percent of the 1981 class preferred contributing to a group plan for medical and dental care, compared to 45 percent in 1980.

In November 1980, the Air Force Times carried the details of a study conducted by two Air Force researchers as to why pilots were leaving the service. According to the article, "The main reason pilots leave the Air Force is they are not allowed to fly enough. All the other reasons--low pay, promotions, excessive responsibilities, etc.--though important, are secondary in the decision to leave the service." (3:1) The majority of pilots in the AWC class of 1981 had a different opinion. Told to assume they were in a flying job and given the opportunity to choose between a 20 percent increase in flying hours or a 20 percent increase in pay and allowances, 68 percent of the pilots selected the pay boost.* This indicates the possible existence of a crossover point between compensation needs and flying needs during an Air Force pilot's career.

One other question in this category which produced interesting results dealt with the amount of non-Air Force income received by each respondent and/or his wife. Possible answers ranged from "less than $1000 annually" to "greater than $30,000 annually." Twenty-one percent indicated outside income in excess of $30,000 annually. This was also the modal response. The reason for asking this question will be covered in more detail in the section dealing with career intentions.

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*Eighty-five percent of the navigators in the class chose the extra pay.

Statistically Significant Demographic Relationships*

Grade: Responses to three questions in this category were dependent on grade. Lieutenant colonels tended to strongly agree more often than colonels that it is difficult to save money on Air Force pay. The gamma value indicated, however, that the relationship in this sample was very weak. Lieutenant colonels were also more concerned about making ends meet than were colonels. The relationship was strong in this sample. Finally, colonels tended to have a bit more non-Air Force income than did lieutenant colonels, although the sample relationship was very weak.

Age: Two response patterns depended on age. Older officers more often indicated that they receive appropriate increases in benefits and privileges with each promotion. Older officers also tended to be more moderate in their criticism of the adequacy of the October 1980 pay raise. Both relationships, however, were weak.

PLSD: As with age, those with older PLSDs tended to be less critical of the amount of the October 1980 pay increase. The relationship was weak.

Aeronautical Rating: Three questions were dependent on aero rating, but all three relationships in this sample were weak. There was a slightly higher tendency among nonrated

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*See appendix C for this Chapter's crosstabs printouts.

officers to indicate that they received appropriate increases in benefits and privileges with each promotion. Nonrated officers also indicated slightly more concern about making financial ends meet (probably because of the absence of flying pay). Finally, nonrated officers tended to more strongly disagree that medical care is a major Air Force benefit.

Question-to-Question Crosstabulations

The relationship between question 127 (there is adequate compensation, in terms of total pay and benefits, for the risks and hardships, of an Air Force career) and question 143 (Air Force benefits are just as attractive as they used to be) was statistically significant and very strong. Most who said compensation was inadequate also said benefits were less attractive, thus confirming the expected consistency of response between these items. Question 127 was also crosstabulated with question 158 (Air Force pay and benefits are comparable to those received for similar responsibilities in private industry). This relationship was statistically significant and very strong, confirming the consistency of response.

In the area of medical benefits, those who considered Air Force medical care to be a major benefit (question 133) generally did not want to provide for health care by contributing under a group plan (question 145). The relationship was statistically significant and fairly strong.

Three crosstabulations were conducted with question 172 which asked respondents to identify the range of their non-Air

Force income. None of these relationships was statistically significant, and all were weak; nevertheless, there is some utility in examining each one separately. First is the relationship between level of extra income and the ability to save money on Air Force pay (question 124). This crosstab indicated a confidence level of 93.7 percent, very near but still below the mandatory 95 percent level. Gamma, however, showed the strength of relationship to be very weak, with a negative sign. An examination of the table indicates that those with lower levels of outside income tend to be the same ones who think it is hard to save money on their Air Force income. The reverse, however, does not seem to be quite the case as higher levels of outside income do not necessarily equate with an attitude that it is easy to save money on Air Force pay. The conclusion is obvious: those with lower incomes find it harder to save money; and no statistical analysis was necessary to confirm that fact!

The most interesting crosstabulation in this financial category is also the most inconclusive one, statistically speaking. Again, the level of outside income was compared to the degree of concern about making financial ends meet (question 167). Here the confidence level in a true relationship was only 41 percent, and the gamma was extremely weak. There are, however, 22 cases of individuals with outside incomes in excess of $30,000 who report a moderate to high concern with making financial ends meet. This contrasts with the 21 cases of individuals with outside incomes of less than $1000 per year who

share the same concern about finances. Any conclusions about this are left to the reader.

Finally, level of outside income was compared to how the class of 1981 viewed the October 1980 pay increase (question 168). Again, the confidence level was low (48.7 percent), and the gamma was weak, with a negative sign. The most reasonable conclusion is that those with high outside incomes were almost as disappointed in the level of the 1980 raise as those with low outside incomes.

Other Observations

Lieutenant colonels tended to more strongly agree that full dental care would be a valuable retention incentive (question 117). While not statistically significant (confidence level: 94.7 percent), the gamma value indicated a reasonably strong relationship for this sample. In a similar vein, younger respondents reported higher degrees of concern with making financial ends meet (question 167). The confidence level was only 93.8 percent, but the gamma was sufficient to indicate another reasonably strong sample relationship.

One question-to-question chi-square test was conducted manually. The written responses to question 189 (how much pay increase is necessary to retain senior officers until they near mandatory retirement) were grouped into ranges as follows:

Percentage Range	Number in Range
0-9%	20
10-14%	43
15-19%	19
20-29%	46
30-100%	9

These ranges were then crosstabulated with the responses to question 164 (what are your career intentions?). The chi-square statistic was 22.54 for 12 degrees of freedom; thus, the relationship was statistically significant at the .05 level. Gamma was not computed, but the relationship pattern indicated that those who intended to stay in the Air Force longer tended to recommend a lower percentage pay increase. The reverse relationship was approximately as strong; those who indicated an intent to retire sooner, wanted more money as an incentive to stay longer.

Category Summary

While the 1981 survey may reflect a slight improvement in the financial outlook of these highly select officers, it is apparent that much ground still needs to be covered before any perceived "comfort" level is reached. Rather than one speculating on what it will take to show substantial improvement, it seems preferable to adopt a "wait and see" approach. The two pay raises planned for 1981, totalling about 14 percent, should help. But it remains the task of the Air War College class of 1982 to tell us how much.

CHAPTER IV

FAMILY CONSIDERATIONS

Response Analysis

In today's ultra-modern American society, the family plays a wider and wider variety of important roles in the life of the successful male wage earner. These roles frequently range from a highly intangible source of love, pride, and satisfaction to a highly tangible source of income needed to keep pace with inflation. In return, the family is also placing greater demands on the husband/father.

The contemporary American family seems less inclined to accept the stresses associated with long hours on the job, sometimes lengthy business trips, and frequent cross-country or even international moves necessitated by career advancement. Wives and children have learned that they can demand--and often receive--more quality time and attention. These problems are frequently magnified when the wife works--either out of economic necessity or to fulfill personal desires, or both. If the wife's job has career potential,* she becomes reluctant to move. She begins to taste success outside the home environment and, like any ambitious person, seeks more. All too often this sets up

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*A recent Air Force Quality of Life survey administered to 5000 service members revealed that 56.3% of officers spouses are pursuing a career. (9:16)

a confrontation between marriage, family, and career(s) And something more and more frequently gives--the marriage, one career, or both careers.

Air Force families are certainly not immune to this classic mise en scene. Often these pressures are magnified exponentially in the military and are frequently translated into a growing family disenchantment toward the military as a way of life. This dissatisfaction usually manifests itself through pressure on the military member to stabilize matters by retiring as soon as possible or at least throttling back on the job. In either case, military readiness may suffer.

The questions in the survey relating to family considerations offer an opportunity to determine how a group of highly successful Air Force officers and their families are coping with the stresses and strains of modern military life. As with the overall survey, there is some good news here too. From a subjective viewpoint it would seem that family attitudes have changed positively in direct proportion to the attitudes of the 1981 class members. The majority of the eight questions in this category reflected improvements from last year While none of the differences were statistically significant, the percentage changes deserve attention and comment.

Approximately 86 percent of the married officers in the class of 1981 believed that an Air Force career had had a positive effect on their families. This rate is slightly more than 10 percentage points higher than last year--a positive

trend. Complementing this trend was the percentage gain in the number of married officers who indicated that their families supported their continuing their careers. This percentage increased from 58 percent in 1980 to nearly 68 percent in 1981. An alternate perspective, however, is that one-third do not feel that their families want them to stay in the Air Force. This amount of negative internal family pressure should be a source of concern to management for several reasons, not the least of which is the influential nature of those expressing this particular opinion.

In terms of assignment stability the changes from 1980 to 1981 were very slight. Almost 89 percent of the class of 1981, versus 85 percent in 1980, said that increased assignment stability would have a positive effect on the Air Force. Correspondingly, the percentage of officers surveyed who want more assignment stability decreased from 56 percent in 1980 to 53 percent in 1981. These latter response rates could be somewhat misleading, because they do not precisely account for any respondents who have had relatively stable careers and who might have preferred to move more often. Approximately 45 percent of both classes reported that they would move unaccompanied to preserve children's education or wives' careers. Interestingly, those who strongly agreed with this statement increased from 10 percent in 1980 to 17 percent in 1981. This 1981 "strongly agree" percentage contrasts to the 19 percent of married Air

Force officers in this class who came to Air War College unaccompanied by their families.

In 1980, slightly more than 76 percent of the class indicated that their wives were working or would soon have to work to maintain the standard of living desired by the family. This percentage decreased more than 10 percentage points in 1981 to just under 66 percent. This reduction seems to indicate that the October 1980 increases in pay and allowances have contributed to improving the desired living standards of at least some senior officers. It will be very interesting to compare the results of the 1982 survey in view of the anticipated 1981 pay increases of about 14 percent.

Last year, 77 percent of the 1980 class felt that their families had to make greater sacrifices for Air Force career advancement than would have been required for comparable advancement in industry. This year that percentage decreased to 65 percent. There is no readily apparent explanation for this trend; however possibilities include an improved concern by leadership for Air Force families and a better understanding of what is required for advancement in the private sector.

The answer to the final question in this category also reflects an improvement from 1980, but, even so, the response percentage is still substantially negative. Last year, only 45 percent said they would encourage their children to consider an Air Force career. This year, 55 percent would offer such encouragement. However, in the author's opinion this still seems about 25 percentage points lower than it should be for this group of officers!

Statistically Significant Demographic Relationships*

Grade: Lieutenant colonels tended to strongly agree more often than colonels with the statement that increased assignment stability would have a positive effect on Air Force organizations and personnel. This relationship was strong. In a similar vein, exactly 75 percent of lieutenant colonels indicated that it is or would soon be necessary for their wives to work to maintain the desired standard of living. This compares to only 55 percent of colonels who responded in the same fashion. This relationship was fairly strong.

Question-to-Question Crosstabulations

As expected, the relationship between questions 115 (my career has had a positive effect on my family) and 144 (my family favors my continuing my Air Force career) was statistically significant and strong. Positive career effects matched closely with families favoring a continued career. Question 144 was also crosstabulated against question 164, which asked the respondents' career intentions. Those who indicated that their families favored their career also tended to be the ones who plan to stay on active duty longer. The relationship was statistically significant and very strong. The lesson is obvious--satisfied families mean longer careers.

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*See appendix D for this chapter's crosstabs printouts.

Question 129 (it is or will soon be necessary for my wife to work to maintain our desired living standard) was compared to two financial questions. The first crosstab was question 167 (various degrees of concern about making financial ends meet). As expected, those whose wives who are working or plan to work are also generally more concerned about making financial ends meet. The relationship was statistically significant and very strong. Conversely, the relationship between question 129 and 172 (what is the amount of non-Air Force income which you and/or your wife receive?) was not statistically significant (confidence level: 42 percent) and very weak. One conclusion which can be reached is that there is almost no association between outside income, even as high as $30,000, and the need for a wife to work to maintain the desired living standard. It could also be said that there are a wide variety of living standards among the group.

Question 148 (increased assignment stability would have a positive effect on the Air Force) had a statistically significant and extremely strong relationship with question 142 (I would prefer more assignment stability). This was an expected result; however, the absence of any "strongly disagree" responses on question 148 resulted in the 4x3 crosstab making the extremely high gamma value a bit suspect.

Other Observations

Officers in the grade of colonel, or who were older, or who had more time-in-service indicated more often than others

that their families favor their continuing their careers. None of these three relationships was significant; confidence levels were: 89 percent for grade, 69 percent for age, and [illegible] percent for time-in-service. However, the gamma values for this particular sample were fairly strong. The possible explanation for this pattern is that the families of the younger, more junior officers are experiencing some degree of ambivalence toward their husbands' careers which will likely continue until their husbands cross the successful-career threshold via promotion to colonel. Despite the Air Force's protestations to the contrary, achieving the grade of colonel is still the real mark of a successful career, especially for an elite group of hard-charging lieutenant colonels attending Air War College.

Category Summary

The most significant information in this category is that senior officers whose families are happy and satisfied with the Air Force tend to stay on active duty longer. The same probably applies to all married Air Force members--not just the senior group.

In this regard, it is worth noting a portion of a letter written approximately four years ago by an Air Force brigadier general to the editor of The Times Magazine, the supplement to the Air Force Times. This letter offered some career advice to young officers and NCOs, and in one paragraph it said: "The Service doesn't come first--people do. The men and women, their

spouses and kids." (10:4) It would appear today that the corporate Air Force seems to appreciate that notion more than ever before--given all the emphasis being paid to people and families. Adequate pay and sincere concern and action directed toward further improvements in the human side of Air Force life are the best tangible solutions for making real progress in the retention arena.

CHAPTER V

SOCIAL LIFE/CAMARADERIE

Response Analysis

This category was added to the survey at the request of an Air War College faculty member who argued, very persuasively, that negative attitudes and trends in the social life/camaraderie aspects of the Air Force life are contributing to the Air Force's retention difficulties. The responses to the five questions in this category would seem to confirm this contention.

Approximately 93 percent of the class disagreed (34 percent strongly) with the statement that "The social/camaraderie aspects of Air Force life are better than they were 10 years ago." Although this question did not ask if social aspects had worsened over the past 10 years, that interpretation does not appear unreasonable, particularly in view of the highly skewed response pattern and the solid proportion who strongly disagreed. Contributing to this interpretation was the response distribution to the statement, "In my last job my supervisors actively emphasized the social/camaraderie aspects of Air Force life." Fifty percent agreed; but fifty percent did not, and the response pattern was one of the most symetrical encountered (9.3% - 40.7% - 40.0% - 10.0%).

In a positive vein, 84 percent agreed (31 percent strongly) that a strong social atmosphere within an organization

is an asset to retention. Similarly, over 91 percent agreed (47 percent strongly) that the best organizations they have worked in had high esprit and morale and strong camaraderie, on and off the job.

It seems clear that most of the officers in this group prefer a strong social life/camaraderie atmosphere; however, Air Force organizations do not seem to be meeting this need. As a possible result, slightly more than 50 percent of this class have turned more to civilian friends and the civilian community for their social life. In the opinion of this author, other factors may also be contributing to this change in social patterns--such as the trend toward off-base living and the growing inability of Air Force clubs to compete with off-base establishments on the bases of price and quality.

Statistically Significant Demographic Relationships*

Time-in-service and PLSD: Those with relatively more time in service and those with older PLSDs had a greater propensity to strongly agree that the best organizations were those with high morale and esprit. Both sample relationships were strong.

Aeronautical rating: More than 63 percent of the pilots and 51 percent of the navigators but only 24 percent of non-rated officers strongly agreed with the statement that the best

*See appendix E for this chapter's crosstabs printouts.

organizations are those with high esprit. A similar pattern emerged with regard to the statement that a strong social atmosphere is an asset to retention. Both sample relationships were strong.

Source of commission: Those who indicated "other" as a source of commission were more inclined to strongly disagree with the statement that the social aspects of Air Force life are better than they were ten years ago. The sample relationship was very weak.

Question-to-Question Crosstabulations

There was a statistically significant, extremely strong relationship between the responses to question 146 (a strong social atmosphere is an asset to retention) and question 156 (the best organizations I've worked in had high esprit and strong camaraderie). Each respondent tended to answer both questions the same way--positive-positive or negative-negative. This fact validates the consistency of response expected between these questions.

The cross tabulation between question 131 (the social aspects of Air Force life are better than they were 10 years ago) and question 160 (have turned more to civilian friends and community for social life) was not statistically significant and reflected a very weak association.

Other Observations

Grade: Colonels tended to agree more often than lieutenant colonels that a strong social life/camaraderie atmosphere is a major asset in retention. Colonels also strongly agreed more often that the best organizations they had been in had high esprit, morale, etc. Both relationships were fairly strong, but neither was statistically significant.

Age: Younger officers more often disagreed and older officers more often strongly agreed that the best organizations they had served in had high esprit and morale were in the younger age categories. The relationship was fairly strong but not statistically significant.

Category Summary

There is an identifiable pattern within the responses to these questions. Not surprisingly, the members of the class most concerned about deficiencies in the social life/camaraderie aspects of Air Force life are those who are rated, older, more senior, or have more years in the Air Force. Class members with these characteristics tend to be the ones who have spent much of their careers in flying jobs where mission, unit cohesiveness, and a strong social tradition provide a great deal of individual satisfaction, esprit, and camaraderie. There may also be a hidden thread of nostalgia in these responses--a longing for the "good old days."

Lessons to be learned from this category are that there is still a strong need among our best senior officers for a healthy, positive Air Force social climate, and that organizations having such a climate are highly desirable places to work.

CHAPTER VI

LEADERSHIP

Response Analysis

The changes of opinion in this category were the most positive of any in the survey. Comparisons of the responses from the two classes reflected differences of statistical significance in nine of the twelve questions in the category. The most dramatic changes were noted in the classes' opinions on how Air Force leaders were dealing with the retention problem. Last year, only 48 percent felt that senior Air Force leaders were well aware of the seriousness of the retention problem. In 1981, this percentage increased to 75 percent. Correspondingly, only 31 percent of the 1980 class said that Air Force senior leaders were taking positive action to improve the quality of life in the Air Force. In 1981, this percentage more than doubled to 76 percent--the largest shift of opinion in the entire survey. Both changes were statistically significant.

The efforts of Air Force leaders to improve the quality of Air Force life are being frustrated by the Congress and the executive branch, according to 87 percent of the class of 1980. Seventy percent of the class of 1981 indicated a similar feeling, a statistically significant shift. Recall that this survey was administered just prior to President Reagan's inauguration.

Even greater evidence of administration and congressional support since then would probably cause that percentage to drop much further if the same question was asked today. It will be very interesting to see the results of this question in the 1982 survey.

There seems to be a realistic appreciation among both classes that it is difficult to resolve career irritants at the unit level. Eighty-three percent of the 1980 class and 78 percent of the 1981 class were of that opinion. However, according to 63 percent of the 1981 class, Air Force leaders are more inclined to take suggestions on retention issues from the squadron and wing levels. This compares to 51 percent in 1980. This latter change was statistically significant.

Three questions in this category dealt with centralization of management. Not unexpectedly, 95 percent of the class of 1980 and 90 percent of the class of 1981 felt that it was unnecessary to centralize management further in spite of tougher budgetary and technological challenges. The 1981 class is less inclined, however, to lay the blame for today's micromanagement environment within the Air Force on demands coming from outside the Air Force. Only 48 percent of the class of 1981 blamed the legislative and executive branches for overcentralizing management, compared to 66 percent of the class of 1980. This trend was also evident in the fact that 71 percent of the class of 1981 said that the Air Force can internally resolve the issue of centralized versus decentralized management. This percentage

was up almost 9 percentage points from the previous year. Since the difference in the answers to the last two questions were statistically significant, it would seem that the class of 1981 is looking askance at the Air Force's inability to halt, and certainly reverse, the micromanagement trend

The remaining four questions considered how the class personally viewed their seniors in the Air Force in terms of quality of leadership and the ability to develop leadership in subordinates. There was a marked difference in the 1980 and 1981 classes in this area. The most significant, both statistically and importantly, was that only 48 percent of the class of 1980 believed that Air Force general officers provided positive and effective leadership. Twelve months later, this percentage increased to 74 percent for the class of 1981. The only possible explanation for this improved attitude is a difference in classes, because the general officer force did not change that much in one year.

While the class of 1981 is much more impressed with the general officer force, approximately half of the class is frustrated by the actions of these same generals. This frustration frequency, however, is 10 percentage points lower than it was in the class of 1980.

Despite these frustration levels, about three-fourths of both classes indicated that in their most recent assignments, they had been given authority commensurate with their rank and responsibility. (The difference in answers to this question was not statistically significant.) Conversely, 62 percent

of the class of 1981 did not feel that the Air Force's institutional environment is conducive to developing military professionals. This percentage represents a decrease from 75 percent in the 1980 class. This question was statistically significant.

Statistically Significant Demographic Relationships*

Age: Younger officers had a slightly higher tendency, and older officers a lesser tendency, to be frustrated by the actions of senior Air Force leadership (question 126). The sample relationship was somewhat weak.

Aeronautical rating: More pilots tended to believe that the issue of centralized versus decentralized management is one that can be resolved internally by the Air Force (question 125). The relationship was fairly strong.

Question-to-Question Crosstabulations

Most of those who felt that senior leaders are well aware of the retention problem (question 119) also said that these leaders are taking positive action to improve the quality of Air Force life (question 128). This relationship was statistically significant and very strong, confirming the expected response consistency. Question 128 was also compared to question 121. (Congress and the executive branch are frustrating

*See appendix F for this chapter's crosstabs printouts.

the efforts of Air Force leaders to improve quality of life.) This relationship was significant and strong.

On the overcentralization of management issue, those who said the issue can be resolved within the Air Force (question 125) also tended to say that the demands of Congress and the executive branch were not the cause of the problem (question 159). The relationship was statistically significant and very strong.

The leadership area within this category also produced response consistency. Those who <u>are not</u> frustrated by the actions of general officers (question 126) also think these general officers provide positive and effective leadership (question 155). Even among those who <u>are</u> frustrated by general officers, the majority still think these generals are doing a good job.

The chi-square test indicated response consistency between question 140 (Air Force leaders are receptive to suggestions about retention from the wing and below level) and question 152. (Most career irritants can be resolved at wing and squadron level.) However the gamma value was extremely weak, indicating the sample relationship was very questionable

Finally, no relationship was indicated between question 135 (in recent assignments, I have been given authority commensurate with my rank and responsibility) and question 150. (The current institutional environment in the Air Force is conducive to developing military professionals.) The confidence level was 61.5 percent, and the gamma was fairly weak.

Other Observations

Aeronautical rating had a moderately strong but not statistically significant relationship with question 152. (The capability to resolve career irritants at wing level and below.) Most respondents disagreed, but nonrated officers disagreed most often. The confidence level was 94.7 percent

Category Summary

Perhaps as a result of the mood of the 1981 class toward the leadership issue, it is difficult to attach much importance to this particular category, simply because it no longer seems to be a problem. Last year, there was a very clear thread of animosity among the majority of responses to the questions which dealt with leadership. This thread does not exist today--in any event, certainly not to the extent which it did last year. The only controversial issue in this portion of the survey is micromanagement. It seems that the 1981 class is much more concerned about it, but the survey does not reveal why. Next year's survey should perhaps probe that issue in more detail.

CHAPTER VII

RETENTION

Response Analysis

Considering all the play given to military retention problems during the last year, not only by the media, but through official channels and from the AWC stage, a member of the class of 1981 would have to be deaf or blind, or both, to say that the Air Force does not have a retention problem. Maybe it was the word serious in the question, or the fact that a senior Air Force leader had just said that retention was looking a bit better, or maybe it was mismarked answers, but there must be a valid explanation why four students in the 1981 class disagreed--one strongly--that retention is a "serious problem."

The responses to the questions in this category were the most heavily skewed in the survey. Moreover, with the exception of the family category, there was a great deal of consistency in the responses from both classes; only one question produced differences in responses which were statistically significant.

Ninety-seven percent of the 1981 class agreed that retention is a serious problem in the Air Force, up 1 percent from 1980. Likewise, 94 percent of the class of 1981 agreed that Air Force retention problems are more real than imaginary, again up 1 percent from 1980.

At the micro level, 83 percent of the 1981 class believe that the Air Force has a retention problem at the senior-

officer level (lieutenant colonel and above). However, only 27 percent of the class would be willing to slow down promotions in order to increase retention at the senior level.

Members of the 1981 class were also asked to write down the percentage increase they would apply to pay and allowances in 1981, over and above a cost of living increase, to provide a strong incentive for career officers to remain on active duty until within two years of retirement. A wide variety of answers was given, ranging from 0 percent to 100 percent. The response mean was 17.4 percent, the median was 14.5 percent, and the mode was 20 percent. (Twenty-eight respondents opted for a 20 percent increase.) For practical purposes the response was bi-modal, as 27 respondents chose a 10 percent increase. There is some doubt that this question was fully understood; hence its reliability is questionable. Nevertheless, the intent was to achieve some insight as to how much it would cost to keep the best people on board through 28 years.

Eighty-five percent of the class of 1981 said it was difficult to motivate young officers and NCOs to make the Air Force a career. A slightly higher percentage (87 percent) of the 1980 class reported difficulty motivating officers. However, only 78 percent of that class indicated difficulty motivating NCOs.

Part of the difficulty in motivating others towards a career may be the motivator's personal beliefs and motivations. In this respect, the class of 1981 has a distinct edge over the

class of 1980. Almost 64 percent of the 1981 class reported that their own motivation towards a career has made it easy for them to promote such a career for others. This percentage contrasts to only 55 percent for the class of 1980, and the difference was statistically significant. Thirty-one percent of the class of 1981 said that an Air Force career is an appealing option in today's society, up 5 percent from the previous year. These latter percentages are not surprising considering that roughly half of each class would encourage their children to seek an Air Force career.

One interesting question sought to determine whether retention problems were caused primarily by an attractive job market or by problems internal to the Air Force. Both classes leaned heavily toward identifying internal problems as the culprit (87 percent in 1980, 85 percent in 1981). Between January 1980 and January 1981, a mild economic recession occurred, and airline-pilot hiring ceased for all intents and purposes. To accommodate those developments, a question was added to the survey asking which had the more bearing, positive or negative, on retention--external factors, such as civilian jobs,or internal factors such as Air Force policies and procedures. Seventy-five percent of the 1981 class identified internal factors. This answer suggests that the Air Force should be able to solve a lot of its own problems in the retention area.

Internal solutions are fine, but, as noted in the financial category and elsewhere, inadequate pay is still the major issue. Asked how they thought the October 1980 pay raise would aid retention, 71 percent of the 1981 class said it would "help some," whereas nearly 24 percent indicated only a neutral or "no help" answer. Obviously, there is still room for improvement.

Statistically Significant Demographic Relationships*

Grade: Lieutenant colonels more often agreed and colonels more often strongly disagreed that an Air Force career is an appealing option in today's society (question 153). The sample relationship was only fairly strong.

Age: There was a very weak relationship between age and question 162. (My own motivation toward the Air Force has made it easy for me to promote a career for others.) Older officers were slightly more positive toward that statement than younger officers.

PLSD: Those with more recent PLSDs tended to agree more often that the Air Force is an appealing employment option. The sample relationship, however, was weak.

Source of Commission: OTS graduates more often tended to believe that the October 1980 pay raise would "help some" in aiding retention.

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*See appendix G for this chapter's crosstabs printouts.

Question-to-Question Crosstabulations

Statistical significance among four crosstabulations validated response consistency in this category. Those who said the Air Force had a serious retention problem (question 161) strongly tended to agree that the retention problem was more real than imaginary (question 122). Most of those who found it hard to motivate NCOs (question 123) also found it difficult for young officers (question 137). Most class members who identified internal problems as the cause of retention problems on question 163 also identified internal factors in question 171. Finally, the majority of those who said the Air Force has a senior-officer-retention problem also said that it was more important to maintain a healthy promotion flow than to increase senior-officer retention.

Other Observations

Regarding the choice between increasing senior officer retention or maintaining a healthy promotion flow, lieutenant colonels were more in favor of the promotion flow than colonels, 83 percent versus 70 percent. The relationship was not statistically significant (confidence level 88.2 percent), but it was fairly strong in the sample.

Category Summary

Both the 1980 and 1981 AWC classes are aware of the retention problems facing the Air Force. They report a high degree of difficulty in motivating young officers and NCOs

toward making the Air Force a career. Some report this difficulty is attributable to their own motivation; however, it is less of a problem for the 1981 class. Internal factors bear the brunt of the blame for poor retention, but pay is still the most significant single issue. The recent pay raise helped, but more pay is needed. This 1981 class believes that the Air Force also has a senior-officer retention problem, but the class feels that maintaining a healthy promotion flow is more important than improving senior-officer retention.

CHAPTER VIII

CAREER INTENTIONS

Response Analysis

This chapter represents the most important portion of the survey. It looks beyond the attitudes toward opinions on the issues, and tries to get a view of how the respondent are planning with regard to their active service.

Before addressing that, we feel we need to take a quick look at some facts and figures about officer voluntary retirements. There seems to be a perception that more and more colonels and lieutenant colonels are retiring each year at earlier and earlier points in their careers (after reaching retirement eligibility, of course). This perception is partially correct. the percentage of retirements is up; however, the average years of active service at retirement has actually been relatively stable, and, in the case of colonels, has even increased about one year. This can be seen from table 1 on page 52.

Intuitively, it would appear that the majority of the additional colonels who are retiring are those who have been on active duty <u>longer</u>; otherwise, the average years of service would be dropping substantially. Table 2, page 52 confirms that conclusion. The loss rates for colonels with longer service time have increased substantially from 1977 through 1979, whereas,

the loss rates are relatively stable for colonels with relatively less service.

TABLE 1

OFFICER VOLUNTARY RETIREMENTS*

Fiscal Year	Colonel			Lieutenant Colonel		
	#	% of elig	Avg yrs of svc	#	% of elig	Avg yrs of svc
1977	698	14.0	25.3	1245	18.2	23.0
1978	618	12.5	25.8	1202	17.7	22.4
1979	804	17.8	26.5	1608	25.3	22.9
1980	795	18.0	26.3	1549	13.3	22.8

*Source: USAFMPC/MPCAR (2)

TABLE 2

COLONEL VOLUNTARY LOSS* RATES BY YEARS OF TAFCS COMPLETED***

TAFCS** (Yrs)	Loss rates per 1000 during 12 mo period ending:		
	Dec 77	Dec 78	Dec 79
22	56	18	28
23	100	72	95
24	152	106	109
25	148	154	193
26	179	200	243
27	211	206	309

*Loss equates to retirement for this grade

**Total Active Federal Commissioned Service

***Source: USAFMPC/MPCYAA (8)

If the members of the class of 1981 do retire at the times indicated by their responses to survey question 164, then the average years of service at retirement for the class would not be too different from the average years of service at retirement for colonels who have recently retired. Nor, for that matter, would the average years of service at retirement for the class of 1980 differ substantially from these averages.

The following are the stated retirement intentions of the two classes:

	1980 Class	1981 Class
1. Will stay as long as they can	5.1%	7.9%
2. Probably will stay as long as they can	17.9%	19.3%
3. Undecided--but won't retire early or stay till mandatory	48.7%	52.1%
4. Probably will retire as soon as eligible	17.1%	14.3%
5. Will retire as soon as eligible	11.1%	6.4%

If years of service at retirement such as 30, 28, 25, 23, and 21 are arbitrarily placed against those percentages, then the average years of service for retirement would be 25.4 years for the 1981 class and 25.0 years for the class of 1980 But those averages are somewhat meaningless, because they blend colonels and lieutenant colonels into a single figure What is revealing, however, is to compare the career intentions of the 1981 class against demographic characteristics, disregarding statistical significance or strength of relationship.

Service-related* demographic crosstabs revealed that only 11 percent of the colonels will, or probably will, retire as soon as eligible. This contrasts with 29 percent for lieutenant colonels. Thirty-five percent of the pilots will, or probably will, stay as long as they can. This compares to 15 percent for navigators and 24 percent for nonrated officers. "Undecided" navigators were highest at 59 percent compared to 52 percent for pilots and 48 percent for nonrated officers. An interesting aside is that 57 percent of the pilots indicated their career goal was general officer. Only 37 percent of the navigators and 40 percent of nonrateds indicated that goal. This combination of aeronautical rating, career intent, and career goal indicates that pilots accurately perceive a greater opportunity for further advancement and longer careers than do the other groups.

Source of commission was a bit surprising, at least on the surface. Only 13 percent of service academy graduates indicated they will, or probably will, stay as long as possible. This compared to 32 percent for OTS, 29 percent for ROTC and 27 percent for "other" (principally aviation cadet). Service academy graduates were the highest "undecided" group at 66 percent, and at 26 percent ROTC graduates were the

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*Grade, aeronautical rating, source of commission (see appendix H for these crosstabs)

highest group to indicate the tendency to retire as soon as possible. In all fairness, these source-of-commission relationships were essentially meaningless, with a gamma of .01 and a confidence level of only 39 percent.

This amount of detail is intended to dispel any notion that the best Air Force colonels and lieutenant colonels are leaning heavily in the direction of much shorter careers. Anderson, in his study, noted the possibility of such a trend among the mumbers of the AWC class of 1980. He reported that 53 percent had become more inclined to retire when first eligible and that 75 percent had become less inclined toward a 30-year career. He concluded that:

> These results . . . should prompt additional research and considerable concern. An institution which promotes from within for all executive positions must be able to retain those groomed for senior executive responsibilities. Professional military education is a poor investment if the graduates do not remain on active duty to assume key leadership position. (1:20)

Once again, the facts do not indicate the existence of a real problem in this area. Moreover, it seems unrealistic to expect the vast majority of senior-service-school graduates to remain till mandatory retirement. Every AWC class is made up of the Air Force's most competitive, ambitious officers, who will soon come face to face with the very real career limitations imposed by an extremely small number of general-officer billets. Not even a majority of graduates can expect promotion to general. Many of those who do not succeed will retire voluntarily to pursue other careers, using the same

drive and ambition that took them so close to the top in the Air Force. Certainly, there are trade-offs here; the Air Force loses a wealth of experience, but the private sector gains a top-notch executive. And the Air Force promotion and assignment sys is preserve the vitality and opportunity so necessary to attract and retain ambitious, competitive younger officers.

In a very real sense, then, the AWC class of 1981 has a very healthy attitude with regard to career intentions. This assessment is made ever more meaningful by the high probability that almost all of the lieutenant colonels in the class will be promoted to colonel and take on a fresh outlook regarding their careers. In fact, 82 percent of the lieutenant colonels and 83 percent of the colonels in the 1981 class reported that another promotion would have a positive impact on their career intentions. The combined class average of 82 percent was 6 percentage points higher than last year, and the difference was statistically significant, primarily because of a higher "strongly agree" percentage in 1981 (44 percent versus 32 percent).

The "Inclination" Questions

As previously noted, the 1980 survey asked respondents their inclinations regarding early or late retirement The results were: 53 percent had become less inclined as soon as eligible, and 75 percent had become less inclined to stay on

board till mandatory retirement. The 1981 class offers an interesting contrast; only 43 percent had become more inclined to exit early, and only 63 percent had become less inclined to stay for a full career. This latter change was statistically significant.

The problem with these two questions is that the results offered no bases for comparison. For example, if a respondent says that he is less inclined to stay in than he was five years ago, does that mean his inclination has dropped from 90 to 85 or from 30 percent to 0 percent, or does it mean that his inclination has not changed at all? To determine this latter possibility, two questions were added to the 1981 version. Among the class of 1981, 25 percent reported that they have always been inclined to remain till mandatory retirement, and 20 percent said they have always been inclined to retire when first eligible. Once again, these answers have limited utility because they do not reveal the degree of inclination. The best solution seems to be to drop these four questions next year and design some questions with adverbial descriptors such as occur in question 167.

Statistically Significant Demographic Relationships*

Grade: This demographic factor was related to three questions. On question 165, 55 percent of lieutenant colonels

*See appendix H for this chapter's crosstabs printouts.

said their career goal was general officer. The sample relationship was very strong. This pattern is also reflected in the grade relationship with question 118. (My career goal is to make O6 and retire while still young enough to compete in the civilian market.) Fifty-eight percent of the lieutenant colonels agreed; 76 percent of the colonels disagreed This sample relationship was also very strong. Finally, 57 percent of colonels thought promotion to general officer was worth the time and effort (question 149); however, 64 percent of lieutenant colonels disagreed. The sample relationship was fairly strong.

Age: Younger members of the class tended to disagree that they were more inclined to remain on active duty till mandatory retirement than five years before (question 120). The relationship for this sample was fairly strong.

PLSD: Respondents with older PLSDs indicated more often that it was not their career goal to make 0-6 and retire early (question 118) The relationship was fairly strong.

Aeronautical rating: Pilots indicated much more often (94 percent of the time) that they have <u>not</u> always been inclined to retire when first eligible (question 154) (Sixty-seven percent of the navigators and 70 percent of the pilots felt the same way.) This relationship was fairly strong.

Source of Commission: Eighty-seven percent of the Academy graduates felt that promotion to general officer was not

worth the time and effort it takes to achieve it (question 149). Those from OTS, ROTC, and "other" split equally on the question. The sample relationship was extremely weak

Question-to-Question Crosstabulations

Question 164 (career intent) was compared to four other questions, three of which were for response-consistency validation. Those who indicated that their career goal was to make colonel and retire while young enough to compete for civilian jobs (question 118) also tended to be considering shorter careers. Likewise, those more inclined to a 30-year career (question 120) indicated a preference for longer careers. Finally, those more inclined to retire as soon as eligible (question 141) tended to also say they were planning to retire early. All three relationships were very strong and statistically significant.

Question 172 (ranges of outside income) was crosstabulated with career intent to test the hypothesis that those leaning toward shorter careers had higher total family incomes, i.e., those planning to retire early were in a better financial position to do so. The relationship was statistically significant, though fairly weak in the sample, tending to confirm the hypothesis. One possible explanation for this relationship is that retirement decisions are influenced by the existence of a high level of outside income and the perceived need to "lock in" that income by removing the instability

factor in an Air Force career. If this theory is correct, then low pay is once more responsible for a retention problem, because financial deficiencies caused the need for the outside income in the first place.

Question 120 (I am more inclined to remain on active duty as long as I can) was compared for response consistency with question 141 (I am more inclined to retire when first eligible). Consistency was validated by statistical significance and a very strong negative gamma value. (Interestingly, eight respondents answered both questions affirmatively.)

Question 165 (career goal) was compared with question 149 (promotion to general officer is worth the time and effort). The relationship, as expected, was statistically significant and very strong. Sixty-nine percent who indicated a career goal of general officer also agreed that the promotion would be worth the effort involved.

Career goal (question 165) had a statistically significant relationship with question 118 (career goal is O-6 and retire young enough to compete in the private sector). Those who indicated colonel as career goal also tended to agree on question 118, and those who marked general officer on question 165, tended to disagree with question 118. The gamma value indicated a very strong sample relationship.

Other Observations

There were two reasonably strong but not statistically significant relationships in the category. First, individuals

who said their career goal was general officer tended to have more time in service. Likewise, those indicating colonel as their goal have relatively less time in service (question 176 versus question 165)

In the second relationship, pilots represented 63 percent of those who have always been inclined to remain on active duty till mandatory retirement (question 178 versus question 130).

Category Summary

The perspective regarding career intent which has been described in this chapter differs substantially from that described by Anderson in the 1980 survey report. This new perspective is attributed more to a variance in viewpoints between analysts (last year's and this year's) than to the results of any statistical tests. Statistically speaking, a true difference between the career attitudes of the AWC classes of 1980 and 1981 exists in only two areas. There is a stronger tendency among the members of the 1981 class to remain on active duty till mandatory retirement, and a larger proportion of the class of 1981 reported that another promotion would have a positive impact on their careers.

This author contends that the career intentions of the top 10 percent of the colonels and lieutenant colonels are positive and healthy. Such an observation is based on a combination of four factors: a detailed analysis of the 1981 survey; the current retirement trends among all Air Force colonels; the needs of the Air Force; and, finally, the needs of

the individuals involved in this study. If this conclusion proves controversial, then the 1982 survey should help resolve the matter, but only if some fine-tuning improvements are made to the questions in this portion of the survey.

CHAPTER IX

MISCELLANEOUS QUESTIONS

Response Analysis

The final questions in the survey required respondents to list the three most positive and the three most negative factors of an Air Force career and then to write down what, in their opinion, was the most serious problem facing the Air Force. These three questions proved to be a real challenge to the respondents as well as to this author.

Numerous post-survey conversations with classmates indicated that in most cases respondents gave these written questions a lot of thought and spent the time necessary to produce some meaningful answers. Some saw it as an opportunity to get something off their chest, and a few took some "cheap shots." The positive and negative lists were the most difficult. There was a reasonable consistency in the first two listed in each category, but the randomness of the third one seemed to indicate it was a struggle for some to come up with three in each category. The "most-serious-problem" question seemed a bit easier and produced a highly consistent set of statements covering only six general categories.

Formulating the results into a manageable list turned out to be a major challenge. Anderson, in last year's study, chose

to list what appeared to stand out as the three most frequently mentioned responses in each area. These were:

Three most positive factors (1980)

1. Job challenge and satisfaction
2. Service to the country
3. The people who make up the Air Force

Three most negative factors (1980)

1. Pay and allowances
2. Family instability or separations
3. Declining benefits

Most serious Air Force problem (1980)

1. Retention of quality people
2. Maintaining a viable force
3. Money for people and weapons systems (1 21-23)

For the 1981 study, a decision was made to categorize all the responses on each question and to build a master category list for each question. The 1981 positive factors are listed in table 3 on pages 65 and 66. The 1981 negative factors are listed in table 4 on pages 67 and 68. Finally, the single most serious problem list is in table 5 on page 69.

As mentioned in chapter II, the ranking of the positive and negative factors was accomplished by awarding 3 points to a factor every time it was listed as number one, 2 points for a number 2 factor, and 1 point for a third place factor. This is essentially the same way press services rank order collegiate athletic teams.

Interesting observations from a comparison of the results from 1980 and 1981 include the fact that "the people" moved to

TABLE 3

POSITIVE FACTORS IN AN AIR FORCE CAREER

FACTOR	NUMBER OF TIMES LISTED AS: #1	#2	#3	POINTS*	% OF POINT GRAND TOTAL
1. The Job/Work					
A. Job Satisfaction	28	17	10	128	15.3%
B. Flying	12	11	3	61	7.3%
C. Challenge (of the job)	13	4	10	57	6.8%
D. Responsibility (of the job)	15	4	1	54	6.5%
E. Job Opportunities	7	-	1	22	2.6%
F. The Job Itself	4	3	4	22	2.6%
G. Job Diversity	-	7	4	18	2.2%
H. Job Technology	-	1	-	2	0.2%
Sub-total of this factor	79	47	33	364	43.6%
2. The People	13	18	20	95	11.4%
3. Service to Nation	16	10	17	85	10.2%
4. Retirement System	10	11	14	66	7.9%
5. Travel	7	6	15	48	5.8%
6. Pay/Benefits	-	12	8	32	3.8%
7. Advancement/Promotion	3	7	5	28	3.4%
8. Leadership Opportunities	3	8	2	27	3.2%
9. Security	3	6	5	26	3.1%

*Based on 3 points for #1, 2 points for #2, 1 point for #3

TABLE 3 (continued)

POSITIVE FACTORS IN AN AIR FORCE CAREER (continued)

	FACTOR	NUMBER OF TIMES LISTED AS: #1	#2	#3	POINTS*	% OF POINT GRAND TOTAL
10.	Professionalism	2	7	-	20	2.4%
11.	Way of Life	1	4	-	11	1.3%
12.	Educational Opportunities	1	1	5	10	1.2%
13.	Impact on Family	-	-	6	6	0.7%
14.	No Positive Factors	1	1	1	6	0.7%
15.	Status/Pride	-	-	4	4	0.5%
16.	Stability	-	1	1	3	0.4%
17.	No Number 3	-	-	2	2	0.2%
18.	Leave	-	-	1	1	0.1%
	Grand Total	139	139	139	834	

*Based on 3 points for #1, 2 points for #2, 1 point for #3

TABLE 4

NEGATIVE FACTORS IN AN AIR FORCE CAREER

FACTOR	NUMBER OF TIMES LISTED AS: #1	#2	#3	POINTS*	% OF POINT GRAND TOTAL
1. Financial Matters					
A. Inadequate Pay and Allowances	37	25	25	186	22.3%
B. Eroding Benefits	5	10	13	48	5.8%
C. Moving Costs	4	2	6	22	2.6%
Sub-total of this factor	46	37	44	256	30.7%
2. Management/Leadership					
A. Management Related	11	18	14	83	10.0%
B. Leadership Related	6	5	3	31	3.7%
C. Policy Related	4	4	11	31	3.7%
Sub-total of this factor	21	27	28	145	17.4%
3. Instability					
A. Family Disruption/Separation	20	12	12	96	11.5%
B. Moving	4	9	5	35	4.2%
Sub-total of this factor	24	21	17	131	15.7%
4. No Control Over Assignments	15	16	10	87	10.4%
5. Promotion/Advancement	9	8	5	48	5.8%
6. Lack of Prestige/Appreciation	6	8	11	45	5.4%
7. Resource Deficiencies	1	8	1	20	2.4%
8. The Job	3	2	3	16	1.9%
9 Navigator Discrimination	5	-	-	15	1.8%

*Based on 3 points for #1, 2 points for #2, 1 point for #3

TABLE 4 (continued)

NEGATIVE FACTORS IN AN AIR FORCE CAREER (continued)

FACTOR	NUMBER OF TIMES LISTED AS: #1	#2	#3	POINTS*	% OF POINT GRAND TOTAL
10. Incompetent People	2	1	3	11	1.3%
11. PME	2	-	4	10	1.2%
12. Long Hours	-	4	-	8	1.0%
13. No Number 3	-	-	8	8	1.0%
14. Too Early Retirement	1	2	-	7	0.8%
15. Non-professionalism	2	-	-	6	0.7%
16. No Number 2	-	3	-	6	0.7%
17. Civilian Leadership	-	2	-	4	0.5%
18. Non-monetary compensation	1	-	-	3	0.4%
19. Inequality in the Workforce	-	-	3	3	0.4%
20. No Number 1	1	-	-	3	0.4%
21. Spouse Requirements	-	-	2	2	0.2%
Grand Total	139	139	139	834	

*Based on 3 points for #1, 2 points for #2, 1 point for #3

TABLE 5

THE SINGLE MOST IMPORTANT ISSUE FACING THE AIR FORCE TODAY

ISSUE	TIMES LISTED	PERCENT
1. Retention	71	51.1%
2. Readiness	24	17.3%
3. Management/Leadership	20	14.4%
4. Inadequate Resources	18	12.9%
5. Compensation	5	3.6%
6. Singles versus Marrieds	1	0.7%
Total	139	

the number two positive factor in 1981 displacing "service to nation" into the number three position. The difference between these factors in 1981, however, was extremely close on a percentage-of-total-points basis--11.4 percent versus 10.2 percent.

On the negative side the difference is much greater and in some respects may not even be comparable owing to the different methods employed in compiling the results. Nevertheless, "Management/Leadership" was the number two negative factor in 1981, displacing "instability" to number three. Note, too, that "Eroding Benefits" is a subfactor under the number one factor in 1981, whereas it was a number two factor in its own right in 1980. As an aside, the number four negative factor, "No Control Over Assignments," would have probably moved up a notch or two if the 1981 survey had been conducted in late February or early March. This conjecture is based on the considerable amount of discontent voiced during that period by a number of officers who had not yet received firm post-graduation assignments.

In terms of the single most important issue facing the Air Force, the 1980 and 1981 lists match closely. In 1981, "Management/Leadership," however, replaced "Inadequate Resources" in the third position

Every written response to each of these questions is listed in appendix I (Positive Factors), appendix J (Negative Factors), and appendix K (Most Important Issue) There were several

reasons for compiling these lists and placing them in the study. The first is to satisfy the curiosity of any reader who might be interested in perusing the lists. The second is to provide a check on the selection process the author used to categorize each item (there will be some disagreement on how that process was accomplished). And the third is to capture the information for future research, not only for next year's survey, but in case anyone should choose to conduct a separate study along the lines of Herzberg's famous Motivation-Hygiene theory, which asserts "that the factors involved in producing job satisfaction (and motivation) are separate and distinct from the factors that lead to job dissatisfaction." (4:56)

In this latter regard, both Anderson and this author noted a striking similarity between the written responses and Herzberg's theory. Herzberg advocates that motivators are "achievement, recognition for achievement, the work itself, responsibility and growth or advancement. The dissatisfaction factors are company policy and administration, supervision, interpersonal relationships, working conditions, salary, status and security."* (4:57) It seems apparent that the factors being listed by the class of 1981 matched closely the types of factors labelled by Herzberg as motivators (positive job factors) and dissatisfiers (negative job factors). It is beyond the scope

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*M. Scott Myers of Texas Instruments has also conducted research in this area. (6:73-88)

of this study to further explore this finding, but a separate study using the information captured over a period of several years might be feasible.

The final question in this miscellaneous category asked respondents to rank order, from most important to least important, a list of reasons which have been frequently given by Air Force personnel as reasons for leaving the Air Force. The 1980 and 1981 rankings were:

Factors	1980	1981
Inadequate pay and allowances.	1	1
Job-caused family considerations	2	2
Civilian job opportunities	3	6
Security of future uncertain	4	5
Air Force management policies.	5	4
Lack of control over assignments	6	3
Lack of enlightened leadership	7	7
Work schedule.	8	8

The only significant change was the move of "Lack of control over assignments" from number 6 in 1980 to number 3 in 1981. There is little value in the listing as it pertains to the purpose of this survey, because it does not reflect how the respondents personally viewed each item as affecting their own circumstances. Rather it represents how one group (the class of 1981) felt about the opinions of another group (all others exiting the Air Force).

Category Summary

It is encouraging to note from the survey that the three most positive factors in an Air Force career are the job, the

people, and the nation. These results certainly indicate that top-quality senior officers in the Air Force like what they are doing for a living as well as whom they are doing it with and for. They also receive a tremendous amount of satisfaction in return.

Conversely, these same officers do not feel that they are receiving proper financial compensation for their chosen line of work. They are concerned about many of the management and policy issues they face on a daily basis. And they view the inherent instability of Air Force life and its impact on families as detracting factors.

It seems obvious at this writing that for the class of 1981, the enduring features of an Air Force career--job satisfaction, personal associations and the sense of importance of the job--far outweigh the negative factors. Moreover, the negative factors are being treated both internally and externally. Many new initiatives are underway including pay increases, higher travel allowances, bonuses for pilots and scientific and technical officers, MWR's "Year of the Family," and the new Office for Family Matters in the Pentagon, to name a few. These efforts should combine to remove the dissatisfactions and create a very optimistic outlook for the decade of the 1980s.

CHAPTER X

CONCLUSION

The last several paragraphs of the preceding chapter more than adequately summarize the results of this survey as seen by this author. In one sentence, the retention outlook for high-quality senior officers, as represented by the AWC class of 1981, is more positive and healthier than that reported for the AWC class of 1980. This improvement is a tribute to the efforts of the senior leadership of not only the Air Force but of all the military services. We are beginning to turn the corner on the enormous retention problem which has been plaguing the Air Force, not just at the junior-officer level but at the senior level as well, and we seem to be overcoming many of the negative attitudes which have prevailed during the last several years.

Hard evidence of this improvement comes from three sources. First and foremost are the results of this survey, most particularly the shifts in opinion about leadership recorded in chapter VI and the healthy career intentions outlook seen in chapter VIII. The second is a news summary from the February 1981 Air Force magazine which stated that:

> Retention of USAF pilots and navigators improved considerably last year, but officials say rated officer retention "remains one of the most important readiness issues of the 80s."
>
> A related development pleasing authorities is the growing number of flyers delaying separation. These extensions "indicate that more pilots and navigators

> will continue to remain on board if pay and entitlements continue to move toward compatibility with the civilian counterparts," Hq USAF said. (5:108)

Finally, Air Force officials have on two recent occasions revised downward the expected number of voluntary officer retirements projected for fiscal year 1981. The original estimate for all officer grades, colonel and below, was 3000. This figure was then reduced to 2600, and most recently to 2400. (2) The long-term effect of these positive signs remains to be seen. There is no doubt, however, that the retention outlook among high-quality senior officers, as represented by the Air War College class of 1981, is healthier and more promising than that indicated by the survey of the class of 1980.

APPENDIX A

ANNOTATED SURVEY

For questions 115 through 163 indicate the DEGREE to which you AGREE or DISAGREE with the statement presented by using the following scale:

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

115. Overall, an Air Force career has had a positive effect on my family. (Mark answer E if single)

'80-	(23.9)	(51.3)	(17.9)	(6.8)
'81-	(20.1)	(62.9)	(11.9)	(2.2)

116. I receive appropriate increases in benefits and privileges with each increase in rank.

80-	(1.7)	(26.7)	(51.7)	(19.8)
81-	(2.9)	(42.9)	(40.0)	(14.3)

117. Full dental care for dependents would be a valuable incentive in retaining quality personnel.

80-	(34.5)	(50.4)	(14.3)	(0.8)
81-	(50.0)	(40.0)	(10.0)	-

118. My career goal is to make O-6 and retire while I am still young enough to compete in the civilian job market.

80-	(19.0)	(32.8)	(41.4)	(6.9)
81-	(14.5)	(28.3)	(42.8)	(14.5)

119. Senior leaders in the Air Force are well aware of the depth and seriousness of the Air Force retention problem.

80-	(5.1)	(42.4)	(36.4)	(16.1)
81-	(18.6)	(56.4)	(21.4)	(3.6)

120. I am more inclined to remain on active duty until mandatory retirement than I was five years ago.

80-	(2.5)	(22.7)	(40.3)	(34.5)
81-	(6.4)	(30.7)	(41.4)	(21.4)

121. The efforts of Air Force senior leadership to improve Air Force life are being frustrated by Congress and the Executive Branch.

80-	(23.3)	(63.8)	(12.1)	(0.9)
	A	B	C	D
81-	(11.4)	(58.6)	(27.9)	(2.1)
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
122. Air Force retention problems are more talk than fact.				
80-	(0.0)	(6.7)	(53.8)	(39.5)
81-	(1.4)	(4.3)	(40.0)	(54.3)
123. I have found it relatively easy to motivate NCOs to stay on for a full Air Force career.				
80-	(0.9)	(20.4)	(63.7)	(15.0)
81-	(0.0)	(15.1)	(63.3)	(21.6)
124. It is not hard to save money on my Air Force income.				
	Not asked in 1980.			
81-	(4.3)	(13.7)	(41.0)	(41.0)
125. The issue of centralized or decentralized management is one that can be resolved internally by the Air Force.				
80-	(11.1)	(51.3)	(29.9)	(7.7)
81-	(16.8)	(54.2)	(26.3)	(2.9)
126. I am frustrated by the actions of senior Air Force leadership.				
80-	(16.1)	(43.2)	(39.0)	(1.7)
81-	(8.6)	(40.7)	(48.6)	(2.1)
127. There is adequate compensation, in terms of total pay and benefits, for the inherent risks and hardships of an Air Force career.				
80-	(0.0)	(10.0)	(42.5)	(47.5)
81-	(1.4)	(8.6)	(51.4)	(38.6)
128. Air Force senior leadership is taking positive and effective action to improve the quality of life in the Air Force.				
80-	(0.0)	(31.1)	(57.1)	(11.8)
81-	(5.0)	(71.4)	(19.3)	(4.3)
129. It is necessary, or will be in the immediate future, for my wife to work at least part time to maintain the living standard we desire for our family. (Mark answer E if single)				
80-	(30.4)	(46.1)	(20.0)	(3.5)
81-	(26.5)	(39.4)	(29.5)	(4.5)

A	B	C	D
STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

130. I have always been inclined to remain on active duty until mandatory retirement.

Not asked in 1980.

81- (6.5) (18.7) (51.8) (23.0)

131. The social/camaraderie aspects of Air Force life are better than they were 10 years ago.

Not asked in 1980.

81- (0.0) (7.2) (59.0) (33.8)

132. I would encourage my son(s) or daughter(s) to consider an Air Force career. (Mark answer E if you have no children)

80- (3.4) (41.5) (41.5) (13.6)

81- (3.9) (50.8) (30.5) (14.8)

133. I consider Air Force medical care to be one of the major benefits in an Air Force career.

80- (17.6) (50.4) (23.5) (8.4)

81- (22.1) (40.7) (25.7) (11.4)

134. Another promotion would have a positive impact on my career intentions.

80- (31.7) (44.2) (20.0) (4.2)

81- (43.6) (38.6) (15.7) (2.1)

135. In my most recent assignments, I have been given authority commensurate with my rank and responsibility.

80- (21.7) (56.7) (15.8) (5.8)

81- (25.7) (49.3) (17.9) (7.1)

136. Considering that the Air Force has become more difficult to manage in a period of rapid technological change and severe budget constraints, there is a need for more centralization in Air Force management.

80- (0.8) (4.2) (63.0) (31.9)

81- (0.0) (10.0) (60.7) (29.3)

137. I have found it relatively easy to motivate young officers to make the Air Force a career.

80- (0.0) (12.6) (62.2) (25.2)

81- (1.4) (13.6) (67.1) (17.9)

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

138. In my last job, my supervisors actively emphasized the social/camaraderie aspects of Air Force life.

Not asked in 1980.

81- (9.3) (40.7) (40.0) (10.0)

139. Looking back, I made a mistake not separating from the Air Force at some earlier point in my career.

80- (5.1) (11.9) (61.9) (21.2)

81- (5.0) (9.3) (55.7) (30.0)

140. Air Force leaders are receptive to suggestions from the squadron and wing levels concerning retention issues.

80- (0.9) (49.6) (38.9) (10.6)

81- (4.4) (58.4) (30.7) (6.6)

141. I am more inclined to retire when first eligible than I was five years ago.

80- (29.5) (33.9) (43.2) (3.4)

81- (14.3) (29.3) (48.6) (7.9)

142. I would prefer more assignment stability than I have had.

80- (13.6) (42.4) (42.4) (1.7)

81- (16.4) (36.4) (45.0) (2.1)

143. Benefits offered by the Air Force are just as attractive as they used to be.

80- (0.8) (1.7) (37.5) (60.0)

81- (1.4) (4.3) (41.4) (52.9)

144. My family favors my continuing an Air Force career. (Mark answer E if single)

80- (8.0) (50.0) (27.7) (14.3)

81- (7.5) (60.2) (24.8) (7.5)

145. If I had a choice, I would prefer to provide for my family's medical and dental care by contributing under a group plan. (Mark answer E if single)

80- (14.2) (31.0) (39.8) (15.0)

81- (11.4) (26.5) (39.4) (22.7)

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

146. A strong social/camaraderie atmosphere in an organization is a major asset to retention.

Not asked in 1980.

81- (30.7) (53.6) (15.0) (0.7)

147. While my family has had to make some sacrifices for my career, they were no greater than those required for comparable advancement in industry. (Mark answer E if single)

80- (4,3) (18.8) (46.2) (30.8)
81- (7.5) (27.6) (38.1) (26.9)

148. Increased assignment stability would have a positive effect on Air Force organizations and personnel.

80- (15.7) (69.6) (13.9) (0.9)
81- (20.0) (68.6) (11.4) (0.0)

149. Promotion to O-7 is well worth the time and effort to achieve it.

80- (2.6) (38.5) (47.9) (11.1)
81- (9.4) (36.2) (43.5) (10.9)

150. The current institutional environment in the Air Force is conducive to developing military professionals.

80- (0.8) (24.6) (62.7) (11.9)
81- (1.4) (37.1) (52.1) (9.3)

151. The Air Force does not have a retention problem in its senior officer (Lt Col and above) ranks.

Not asked in 1980.

81- (2.9) (13.7) (53.2) (30.2)

152. Most career irritants can be resolved by effective leadership at the wing level and below.

80- (2.5) (14.2) (63.3) (20.0)
81- (2.2) (19.4) (51.8) (26.6)

153. An Air Force career is an appealing employment option in society today.

80- (0.0) (25.8) (62.5) (11.7)
81- (1.4) (29.3) (55.7) (13.6)

154. I have always been inclined to retire when first eligible.

Not asked in 1980.

81- (1.4) (18.6) (62.6) (17.1)

STRONGLY AGREE AGREE DISAGREE STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

155. My overall impression of Air Force general officers is that they provide positive and effective leadership.

80-	(0.0)	(48.3)	(44.0)	(7.7)
81-	(3.6)	(70.7)	(20.7)	(5.0)

156. During my career, the best organizations I've worked in were those with high esprit and morale, and a strong sense of camaraderie, both on and off the job.

Not asked in 1980.

81-	(47.1)	(44.3)	(8.6)	(0.0)

157. I would go PCS unaccompanied rather than disrupt my children's education and/or my wife's career. (Mark answer E if single)

80-	(9.6)	(35.7)	(44.3)	(10.4)
81-	(16.7)	(28.0)	(44.7)	(10.6)

158. My overall pay and benefits, including the present retirement system, are comparable to those received for similar responsibility and experience in private industry.

80-	(0.0)	(9.2)	(43.3)	(47.5)
81-	(0.7)	(11.4)	(40.7)	(47.1)

159. Most of the centralization and micro-management in the Air Force today is the result of demands for information by Congress and the Executive Branch.

80-	(25.4)	(40.7)	(29.7)	(4.2)
81-	(5.8)	(42.4)	(40.3)	(11.5)

160. During the past decade and when stationed in the US, my wife and I have turned more and more to civilian friends and the civilian community for our social life.

Not asked in 1980.

81-	(14.7)	(36.0)	(41.2)	(8.1)

161. Retention of quality people is a serious problem in the Air Force today.

80-	(53.8)	(42.0)	(4.2)	(0.0)
81-	(59.3)	(37.9)	(2.1)	(0.7)
	A	B	C	D

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

	A	B	C	D
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE

162. My own motivation towards an Air Force career has made it easy for me to promote an Air Force career for others.

80-	(4.3)	(50.9)	(41.4)	(3.4)
81-	(11.4)	(52.1)	(34.3)	(2.1)

163. Recent retention problems are more the result of a temporarily attractive job market than a reflection of internal problems within the Air Force.

80-	(0.0)	(12.7)	(63.6)	(23.7)
81-	(2.1)	(12.9)	(59.3)	(25.7)

For questions 164 through 188 select the single response you consider most appropriate and mark the corresponding letter on the answer sheet.

164. Which of the following best describes your career intentions?

80		81
(5.1)	A. I will stay on active duty as long as I can.	(7.9)
(17.9)	B. I am undecided, but I will probably stay on active duty as long as I can.	(19.3)
(48.7)	C. I am undecided, but I will probably remain on active duty past initial retirement eligibility, but will retire prior to mandatory retirement.	(52.1)
(17.1)	D. I am undecided, but I will probably retire at 20 years or upon completion of my present commitment.	(14.3)
(11.1)	E. I will retire at 20 years or upon completion of my present commitment.	(6.4)

165. My career goal is to achieve the grade of:

	80	81
A. Lieutenant Colonel	(only G.C. pct. avail from 1980)	(0.7)
B. Colonel		(38.6)
C. General officer	(55.6)	(47.1)
D. I'm not sure at this time.		(13.6)

166. Which of the following would you prefer if you were a pilot or navigator in a flying job?

A. A 20 percent increase in flying hours 27.8 (of those rated)

B. A 20 percent increase in pay and allowances (including flight pay) 72.2% (of those rated)

C. I am nonrated.

167. Which of the words listed below most appropriately fits in the blank to describe your situation?

"I am _____ concerned about making financial ends meet"

A. Always (23.6)

B. Usually (30.7)

C. Sometimes (32.1)

D. Seldom (11.4)

E. Never (2.1)

168. Which of the phrases listed below best describes how you <u>personally</u> view the recent increases in pay and allowances?

A. Far more than enough (0)

B. More than enough (0.7)

C. About right (16.4)

D. Less than adequate (66.4)

E. Far less than adequate (16.4)

169. Which of the phrases listed below best describes how you think the recent increases in pay and allowances will aid in improving Air Force-wide retention?

A. Help a lot (5.0)

B. Help some (70.7)

C. Neutral impact (10.0)

D. No help; it will take some more (11.4)

E. No help; a lot more is necessary. (2.9)

170. Assuming there is a trade-off between the following items, which do you think is most important to the Air Force?

A. Increasing the retention of experienced senior officers. (22.9)

B. Maintaining a healthy promotion opportunity and flow through the field grade ranks. (77.1)

171. In your opinion, which of the following has the most bearing positive or negative, on retention.

A. External factors, such as the civilian job market. (25.0)

B. Internal factors, such as Air Force policies and procedures. (75.0)

172. Not counting your military pay and allowances, which of the following best describes the amount of before taxes income which you and/or your wife receive? Be sure to include interest, dividends, investment income, other wages, etc. (Note: if your wife is here with you and she worked before you came to school and will work at your next duty location, please include her past or projected earnings even though she may not be working while she is here.)

A. Less than $1,000 annually (15.7)

B. $1,000 to $3,000 annually (18.6)

C. $3,001 to $5,000 annually (9.3)

D. $5,001 to $10,000 annually (15.7)

E. $10,001 to $20,000 annually (8.6)

F. $20,001 to $30,000 annually (10.7)

G. Greater than $30,000 annually (21.4)

173. What is your current grade?

	80	81	
A. Colonel	(39.6)	(36.4)	(45.7)
B. Lt Col (Colonel selectee)		(9.3)	
C. Lt Colonel	(60.3)	(54.3)	

174. What is your date of rank, year only? (data not used in survey analysis)
80- not asked

A. 1976 B. 1977 C. 1978 D. 1979 E. 1980

175. What is your present age?

	A. 36-39	B. 40-42	C. 43-45	D. 46-49	E. ?
80-	(20.6)	(60.3)	(15.7)	(3.3)	
81-	(25.0)	(47.1)	(17.9)	(7.9)	(2.1)

176. How many years of service do you have for retirement?

80	81		80	81
(18.1)	(20.0)	A. 21 or more	C. 16-18 (47.9)	(47.9)
(29.7)	(25.7)	B. 19-20	D. 15 or less (4.1)	(6.4)

177. In what year were you commisioned?
1981 data only

A. 1959 (9.4)	C. 1961 (18.7)	E. 1963 (19.4)	G. 1965 (3.6)	I. Other (0.7)
B. 1960 (15.8)	D. 1962 (14.4)	F. 1964 (14.4)	H. 1966 (2.2)	

178. What is your aeronautical rating?

80-	(41.3)	(20.6)	(38.0)
	A. Pilot	B. Navigator	C. Nonrated
81-	(45.0)	(19.3)	(35.7)

179. What is your source of commission?

80	81		80	81
(47.1)	(55.0)	A. ROTC	C. Service academy (14.0)	(10.0)
(17.3)	(15.7)	B. OTS	D. Other. (21.5)	(18.6)

180 through 187. The following are often given as reasons for separating from the Air Force. From your own experience in dealing with Air Force personnel and working the retention problem, rank these reasons from the most important/frequent (1) to the least important/frequent (8). Put the letter of the most important factor in answer number 180. Continue down the list until the least important factor is in answer number 187

	80	81
A. Lack of enlightened leadership	7	7
B. Air Force management policies	5	4
C. Inadequate pay and allowances	1	1
D. Security of future uncertain	4	5
E. Lack of control over assignments	6	3
F. Job-caused family considerations	2	2
G. Work schedule	8	8
H. Civilian job opportunities	3	6

188. What should be the active duty service commitment for promotion to colonel?
Not asked in 1980

A. None (8.1)	C. 2 years (57.4)	E. 4 years (6.6)
B. 1 year (12.5)	D. 3 years (14.0)	F. 5 or more years (1.5)

Questions 189 through 192 require written answers. After you have completed this portion, remove this last page and place it, along with the scored answer sheet into the large envelope which was used to forward the survey to you. Place the large envelope containing these two items in the student evaluation box in the lounge area. Please do not fold or staple the scored answer sheet.

189. What percentage increase would you apply to your pay and allowances in 1981, over and above a cost of living increase, to provide a strong incentive for career officers to remain on active duty until within two years of mandatory retirement? (Note: consider your tax bracket in formulating your answer.)

_____ percent

17.4 percent (mean)
14.5 percent (median)
20.0 percent (mode)

190. What, for you, are the three most positive factors in an Air Force career?

1. The job, the work (includes eight sub-categories)
2. The people (In the 1980 survey, numbers two and three were reversed)
3. Service to nation

191. What, for you, are the three most negative factors in an Air Force career?

1. Financial matters (includes three sub-categories)
2. Management/Leadership (includes three sub-categories)
3. Instability (includes two sub-categories)

In 1980, instability was #2 and benefits was #3

192. What is the single most important issue facing the Air Force today?

Retention (in both 1980 and 1981)

Thank you very much for taking the time to complete this questionnaire. Remember, place both this last page and the scored answer sheet into the large envelope and put the envelope in the student evaluation box in the lounge.

APPENDIX B

SPSS t-test RESULTS

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q115	POSITIVE FAMILY EFFECT							
	GROUP 1	117	2.0769	0.832	0.077	1.20	216.83	0.230
	GROUP 2	134	1.9627	0.642	0.055			
Q116	BENES INCREASE WITH RANK							
	GROUP 1	116	2.8966	0.727	0.067	2.58	248.47	0.011
	GROUP 2	140	2.6571	0.756	0.064			
Q117	DEPENDENT DENTAL CARE							
	GROUP 1	119	1.8151	0.701	0.064	2.52	245.73	0.012
	GROUP 2	140	1.6000	0.666	0.056			
Q118	O-6 CAREER GOAL							
	GROUP 1	116	2.3621	0.869	0.081	-1.88	248.01	0.061
	GROUP 2	138	2.5725	0.911	0.078			
Q119	RETENTION PROBLEM							
	GROUP 1	118	2.6356	0.813	0.075	5.51	238.08	0.000
	GROUP 2	140	2.1000	0.733	0.062			
Q120	MAANDATORY RETIREMENT							
	GROUP 1	119	3.0672	0.821	0.075	2.76	253.37	0.006
	GROUP 2	140	2.7786	0.857	0.072			
Q121	FRUSTATED BY CONGRESS							
	GROUP 1	116	1.9052	0.618	0.057	-3.77	250.39	0.000
	GROUP 2	140	2.2071	0.662	0.056			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q122	RETENTION MORE TALK							
	GROUP 1	119	3.3277	0.598	0.055	-1.85	255.42	0.065
	GROUP 2	140	3.4714	0.651	0.055			
Q123	MOTIVATE NCOS							
	GROUP 1	113	2.9292	0.623	0.059	-1.74	236.61	0.083
	GROUP 2	139	3.0647	0.604	0.051			
Q124	SAVE MONEY							
	GROUP 1	0	0.	0.	0.	-45.25	138.00	0.000
	GROUP 2	139	3.1871	0.830	0.070			
Q125	CENTRALIZED MANAGEMENT							
	GROUP 1	117	2.3419	0.779	0.072	1.98	239.63	0.048
	GROUP 2	137	2.1533	0.726	0.062			
Q126	FRUSTRATED							
	GROUP 1	118	2.2627	0.745	0.069	-2.01	239.88	0.045
	GROUP 2	140	2.4429	0.681	0.058			
Q127	ADEQUATE COMPENSATION							
	GROUP 1	120	3.3750	0.662	0.060	1.24	253.55	0.214
	GROUP 2	140	3.2714	0.677	0.057			
Q128	SENIOR LEADERSHIP IMPROVES LIFE							
	GROUP 1	119	2.8067	0.628	0.058	7.51	246.88	0.000
	GROUP 2	140	2.2286	0.604	0.051			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q129	WIFE WORKS							
	GROUP 1	115	1.9652	0.805	0.075	-1.47	243.57	0.142
	GROUP 2	132	2.1212	0.856	0.075			
Q130	MANDATORY REQUIREMENT							
	GROUP 1	0	0.	0.	0.	-41.85	138.00	0.000
	GROUP 2	139	2.9137	0.821	0.070			
Q131	SOCIAL ASPECTS							
	GROUP 1	0	0.	0.	0.	-65.88	138.00	0.000
	GROUP 2	139	3.2662	0.585	0.050			
Q132	ENCOURAGE KIDS							
	GROUP 1	118	2.6525	0.755	0.070	0.91	243.70	0.362
	GROUP 2	128	2.5625	0.791	0.070			
Q133	MEDICAL CARE							
	GROUP 1	119	2.2269	0.838	0.077	-0.34	256.23	0.734
	GROUP 2	140	2.2643	0.934	0.079			
Q134	PROMOTION INPACT							
	GROUP 1	120	1.9667	0.829	0.076	2.00	248.02	0.046
	GROUP 2	140	1.7643	0.792	0.067			
Q135	AUTHORITY COMMENSURATE WITH RANK							
	GROUP 1	120	2.0583	0.781	0.071	-0.06	256.73	0.953
	GROUP 2	140	2.0643	0.850	0.072			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q136	MORE CENTRALIZATION							
	GROUP 1	119	3.2605	0.574	0.053	0.93	253.22	0.355
	GROUP 2	140	3.1929	0.599	0.051			
Q137	MOTIVATE YOUNG OFFICERS							
	GROUP 1	119	3.1261	0.604	0.055	1.48	251.21	0.141
	GROUP 2	140	3.0143	0.611	0.052			
Q138	SUPERVISORS EMPHASIZE SOCIAL							
	GROUP 1	0	0.	0.	0.	-37.07	139.00	0.000
	GROUP 2	140	2.5071	0.800	0.068			
Q139	EARLIER RETIREMENT							
	GROUP 1	118	2.9915	0.734	0.068	-1.24	251.75	0.217
	GROUP 2	140	3.1071	0.765	0.065			
Q140	RECEPTIVE TO SUGGESTIONS							
	GROUP 1	113	2.5929	0.690	0.065	2.28	237.61	0.023
	GROUP 2	137	2.3942	0.679	0.058			
Q141	RETIRE WHEN ELIGIBLE							
	GROUP 1	118	2.3051	0.822	0.076	-1.88	249.96	0.061
	GROUP 2	140	2.5000	0.835	0.071			
Q142	ASSIGNMENT STABILITY							
	GROUP 1	118	2.3220	0.727	0.067	-0.07	252.89	0.944
	GROUP 2	140	2.3286	0.772	0.065			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q143 AF BENES							
GROUP 1	120	3.5667	0.576	0.053	1.44	257.71	0.151
GROUP 2	140	3.4571	0.650	0.055			
Q144 FAMILY CONTINUE CAREER							
GROUP 1	112	2.4821	0.838	0.079	1.57	220.89	0.117
GROUP 2	133	2.3233	0.724	0.063			
Q145 MEDICAL AND DENTAL INSURANCE							
GROUP 1	113	2.5575	0.916	0.086	-1.49	238.96	0.137
GROUP 2	132	2.7348	0.940	0.082			
Q146 SOCIAL FOR RETENTION							
GROUP 1	0	0.	0.	0.	-32.10	139.00	0.000
GROUP 2	140	1.8571	0.685	0.058			
Q147 FAMILY SACRIFICES							
GROUP 1	117	3.0342	0.819	0.076	1.75	248.73	0.081
GROUP 2	134	2.8433	0.908	0.078			
Q148 ASSIGNMENT STABILITY							
GROUP 1	115	2.0000	0.577	0.054	1.20	239.74	0.232
GROUP 2	140	1.9143	0.556	0.047			
Q149 PROMOTION TO O-7							
GROUP 1	117	2.6752	0.705	0.065	1.24	252.83	0.218
GROUP 2	138	2.5580	0.811	0.069			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE	NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q150 PROFESSIONALISM							
GROUP 1	118	2.8559	0.617	0.057	2.05	252.89	0.041
GROUP 2	140	2.6929	0.656	0.055			
Q151 RETENTION PROB WITH SR OFFICERS							
GROUP 1	0	0.	0.	0.	-49.58	138.00	0.000
GROUP 2	139	3.1079	0.739	0.063			
Q152 CAREER IRRITANTS							
GROUP 1	120	3.0083	0.667	0.061	-0.23	256.55	0.816
GROUP 2	139	3.0288	0.742	0.063			
Q153 APPEALING CAREER							
GROUP 1	120	2.8583	0.598	0.055	0.56	257.68	0.577
GROUP 2	140	2.8143	0.674	0.057			
Q154 RETIRE							
GROUP 1	0	0.	0.	0.	-54.29	139.00	0.000
GROUP 2	140	2.9571	0.645	0.054			
Q155 IMPRESSION OF GENERALS							
GROUP 1	116	2.5948	0.632	0.059	4.14	241.78	0.000
GROUP 2	140	2.2714	0.610	0.052			
Q156 BEST ORGANIZATION							
GROUP 1	0	0.	0.	0.	-29.78	139.00	0.000
GROUP 2	140	1.6143	0.641	0.054			

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q157	UNACCOMPANIED PCS							
	GROUP 1	115	2.5565	0.808	0.075			
	GROUP 2	132	2.4924	0.895	0.078	0.59	244.69	0.555
Q158	PAY COMPARABILITY							
	GROUP 1	120	3.3833	0.651	0.059			
	GROUP 2	140	3.3429	0.707	0.060	0.48	256.70	0.63[illegible]
Q159	CENTRALIZATION BY CONGRESS							
	GROUP 1	118	2.1271	0.843	0.078			
	GROUP 2	139	2.5755	0.771	0.065	-4.42	239.67	0.000
Q160	CIVILIAN FRIENDS							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	136	2.4265	0.840	0.072	-33.69	135.00	0.000
Q161	RETENTION OF QUALITY							
	GROUP 1	119	1.5042	0.580	0.053			
	GROUP 2	140	1.4429	0.579	0.049	0.85	250.08	0.397
Q162	OWN MOTIVATION							
	GROUP 1	116	2.4397	0.636	0.059			
	GROUP 2	140	2.2714	0.687	0.058	2.03	250.86	0.043
Q163	RETENTION							
	GROUP 1	118	3.1102	0.596	0.055			
	GROUP 2	140	3.0857	0.684	0.058	0.31	255.70	0.759

GROUP 1 - TYPE EQ 1.
GROUP 2 - TYPE EQ 2.

VARIABLE		NUMBER OF CASES	MEAN	STANDARD DEVIATION	STANDARD ERROR	SEPARATE VARIANCE ESTIMATE T VALUE	DEGREES OF FREEDOM	2-TAIL PROB.
Q164	CAREER INTENT							
	GROUP 1	117	3.1111	0.998	0.092			
	GROUP 2	140	2.9214	0.953	0.081	1.55	242.54	0.123
Q165	CAREER GOAL							
	GROUP 1	115	2.4000	0.825	0.077			
	GROUP 2	140	2.7357	0.695	0.059	-3.47	223.47	.001
Q166	RATING PREFRES							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	140	2.1786	0.712	0.060	-36.19	139.00	0.000
Q167	FINANCIAL							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	140	2.3786	1.035	0.087	-27.19	139.00	0.000
Q168	PAY INCREASES							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	140	3.9857	0.600	0.051	-78.65	139.00	0.000
Q169	PAY VS RETENTION							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	140	2.3643	0.858	0.073	-32.59	139.00	0.000
Q170	RETENTION VS PROMOTION							
	GROUP 1	0	0.	0.	0.			
	GROUP 2	140	1.7714	0.421	0.036	-49.74	139.00	0.000

APPENDIX C

FINANCIAL CONSIDERATIONS CROSSTABS

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * *

Q173 GRADE BY Q124 SAVE MONEY

* PAGE

Q173	Q124	A	B	C	D	ROW TOTAL
	COUNT	1.	2.	3.	4.	
	ROW PCT					
	COL PCT					
	TOT PCT					
1.		0	10	32	22	64
A		0.	15.6	50.0	34.4	46.0
		0.	52.6	56.1	38.6	
		0.	7.2	23.0	15.8	
3.		6	9	25	35	75
C		8.0	12.0	33.3	46.7	54.0
		100.0	47.4	43.9	61.4	
		4.3	6.5	18.0	25.2	
COLUMN TOTAL		6 4.3	19 13.7	57 41.0	57 41.0	139 100.0

86

CHI SQUARE = 9.06345 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0285

CRAMER'S V = 0.25535

CONTINGENCY COEFFICIENT = 0.24741

LAMBDA (ASYMMETRIC) = 0.12500 WITH Q173 DEPENDENT. = 0.12195 WITH Q124 DEPENDENT.

LAMBDA (SYMMETRIC) = 0.12329

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05918 WITH Q173 DEPENDENT. = 0.03586 WITH Q124

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04466

KENDALL'S TAU B = 0.05494 SIGNIFICANCE = 0.2471

KENDALL'S TAU C = 0.06211 SIGNIFICANCE = 0.2471

GAMMA = 0.09554

SOMERS'S D (ASYMMETRIC) = 0.04829 WITH Q173 DEPENDENT. = 0.06250 WITH Q124 DEPENDENT.

SOMERS'S D (SYMMETRIC) = 0.05448

ETA = 0.25535 WITH Q173 DEPENDENT. = 0.00051 WITH Q124 DEPENDENT.

PEARSON'S R =-0.00050 SIGNIFICANCE = 0.4977

NUMBER OF MISSING OBSERVATIONS = 1

FILE LEE (CREATION DATE = 02-10-81)

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q173 GRADE BY Q167 FINANCIAL
* PAGE

Q173 \ Q167 (COUNT / ROW PCT / COL PCT / TOT PCT)	A 1.	B 2.	C 3.	D 4.	E 5.	ROW TOTAL
A 1.	10	13	27	14	0	64
	15.6	20.3	42.2	21.9	0.	45.7
	30.3	30.2	60.0	87.5	0.	
	7.1	9.3	19.3	10.0	0.	
C 3.	23	30	18	2	3	76
	30.3	39.5	23.7	2.6	3.9	54.3
	69.7	69.8	40.0	12.5	100.0	
	16.4	21.4	12.9	1.4	2.1	
COLUMN TOTAL	33	43	45	16	3	140
	23.6	30.7	32.1	11.4	2.1	100.0

CHI SQUARE = 24.79574 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.0001
CRAMER'S V = 0.42085
CONTINGENCY COEFFICIENT = 0.38790
LAMBDA (ASYMMETRIC) = 0.32813 WITH Q173 DEPENDENT. = 0.12632 WITH Q167 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.20755
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.14108 WITH Q173 DEPENDENT. = 0.06957 WITH Q167
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09318
KENDALL'S TAU B = -0.29059 SIGNIFICANCE = 0.0001
KENDALL'S TAU C = -0.35061 SIGNIFICANCE = 0.0001
GAMMA = -0.46059
SOMERS'S D (ASYMMETRIC) = -0.23908 WITH Q173 DEPENDENT. = -0.35321 WITH Q167 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.28515
ETA = 0.42085 WITH Q173 DEPENDENT. = 0.28876 WITH Q167 DEPENDENT.
PEARSON'S R =-0.28876 SIGNIFICANCE = 0.0003

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q172 EXTRA INCOME
* PAGE

Q173	Q172 COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	E 5.	F 6.	G 7.	ROW TOTAL
A	1.	8	11	7	14	3	3	18	64
		12.5	17.2	10.9	21.9	4.7	4.7	28.1	45.7
		36.4	42.3	53.8	63.6	25.0	20.0	60.0	
		5.7	7.9	5.0	10.0	2.1	2.1	12.9	
C	3.	14	15	6	8	9	12	12	76
		18.4	19.7	7.9	10.5	11.8	15.8	15.8	54.3
		63.6	57.7	46.2	36.4	75.0	80.0	40.0	
		10.0	10.7	4.3	5.7	6.4	8.6	8.6	
	COLUMN TOTAL	22 / 15.7	26 / 18.6	13 / 9.3	22 / 15.7	12 / 8.6	15 / 10.7	30 / 21.4	140 / 100.0

100

CHI SQUARE = 12.62925 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.0493
CRAMER'S V = 0.30035
CONTINGENCY COEFFICIENT = 0.28765
LAMBDA (ASYMMETRIC) = 0.20313 WITH Q173 DEPENDENT. = 0.02727 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.09195
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06791 WITH Q173 DEPENDENT. = 0.02471 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03623
KENDALL'S TAU B = -0.06532 SIGNIFICANCE = 0.1901
KENDALL'S TAU C = -0.08449 SIGNIFICANCE = 0.1901
GAMMA = -0.09966
SOMERS'S D (ASYMMETRIC) = -0.05013 WITH Q173 DEPENDENT. = -0.08512 WITH Q172 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.06310
ETA = 0.30035 WITH Q173 DEPENDENT. = 0.06316 WITH Q172 DEPENDENT.
PEARSON'S R =-0.06316 SIGNIFICANCE = 0.2292

* * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * *
Q175 AGE BY Q116 BENES INCREASE WITH RANK
* PAGE

COUNT / ROW PCT / COL PCT / TOT PCT

Q175 \ Q116		A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	0	13	12	10	35
		0.	37.1	34.3	28.6	25.0
		0.	21.7	21.4	50.0	
		0.	9.3	8.6	7.1	
B	2.	2	28	29	7	66
		3.0	42.4	43.9	10.6	47.1
		50.0	46.7	51.8	35.0	
		1.4	20.0	20.7	5.0	
C	3.	1	10	11	3	25
		4.0	40.0	44.0	12.0	17.9
		25.0	16.7	19.6	15.0	
		0.7	7.1	7.9	2.1	
D	4.	0	8	3	0	11
		0.	72.7	27.3	0.	7.9
		0.	13.3	5.4	0.	
		0.	5.7	2.1	0.	
E	5.	1	1	1	0	3
		33.3	33.3	33.3	0.	2.1
		25.0	1.7	1.8	0.	
		0.7	0.7	0.7	0.	
COLUMN TOTAL		4	60	56	20	140
		2.9	42.9	40.0	14.3	100.0

CHI SQUARE = 22.69612 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0304
CRAMER'S V = 0.23246
CONTINGENCY COEFFICIENT = 0.37350
LAMBDA (ASYMMETRIC) = 0.04054 WITH Q175 DEPENDENT. = 0.02500 WITH Q116 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.03247
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04964 WITH Q175 DEPENDENT. = 0.05777 WITH Q116
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05339
KENDALL'S TAU B = -0.18040 SIGNIFICANCE = 0.0077
KENDALL'S TAU C = -0.15769 SIGNIFICANCE = 0.0077
GAMMA = -0.27239

CROSSTABULATION OF Q175 AGE BY Q168 PAY INCREASES

Q175	COUNT / ROW PCT / COL PCT / TOT PCT	B 2.	C 3.	D 4.	E 5.	ROW TOTAL
A	1.	0	7	19	9	35
		0.	20.0	54.3	25.7	25.0
		0.	30.4	20.4	39.1	
		0.	5.0	13.6	6.4	
B	2.	1	8	49	8	66
		1.5	12.1	74.2	12.1	47.1
		100.0	34.8	52.7	34.8	
		0.7	5.7	35.0	5.7	
C	3.	0	1	19	5	25
		0.	4.0	76.0	20.0	17.9
		0.	4.3	20.4	21.7	
		0.	0.7	13.6	3.6	
D	4.	0	5	5	1	11
		0.	45.5	45.5	9.1	7.9
		0.	21.7	5.4	4.3	
		0.	3.6	3.6	0.7	
E	5.	0	2	1	0	3
		0.	66.7	33.3	0.	2.1
		0.	8.7	1.1	0.	
		0.	1.4	0.7	0.	
	COLUMN TOTAL	1	23	93	23	140
		0.7	16.4	66.4	16.4	100.0

CHI SQUARE = 21.32003 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0459
CRAMER'S V = 0.22530
CONTINGENCY COEFFICIENT = 0.36354
LAMBDA (ASYMMETRIC) = 0.01351 WITH Q175 DEPENDENT. = 0.02128 WITH Q168 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.01653
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05395 WITH Q175 DEPENDENT. = 0.07734 WITH Q168
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.06356
KENDALL'S TAU B = -0.09114 SIGNIFICANCE = 0.1138
KENDALL'S TAU C = -0.07102 SIGNIFICANCE = 0.1138
GAMMA = -0.14872
SOMERS'S D (ASYMMETRIC) = -0.10554 WITH Q175 DEPENDENT. = -0.07871 WITH Q168 DEPENDENT.

CROSSTABULATION OF Q177 YEAR COMMISSIONED BY Q168 PAY INCREASES

Q177	COUNT / ROW PCT / COL PCT / TOT PCT	Q168 B (2)	C (3)	D (4)	E (5)	ROW TOTAL
1		0	3	7	3	13
A		0.	23.1	53.8	23.1	9.5
		0.	14.3	7.6	13.0	
		0.	2.2	5.1	2.2	
2		0	2	15	5	22
B		0.	9.1	68.2	22.7	16.1
		0.	9.5	16.3	21.7	
		0.	1.5	10.9	3.6	
3		0	2	22	2	26
C		0.	7.7	84.6	7.7	19.0
		0.	9.5	23.9	8.7	
		0.	1.5	16.1	1.5	
4		1	0	16	3	20
D		5.0	0.	80.0	15.0	14.6
		100.0	0.	17.4	13.0	
		0.7	0.	11.7	2.2	
5		0	5	17	5	27
E		0.	18.5	63.0	18.5	19.7
		0.	23.8	18.5	21.7	
		0.	3.6	12.4	3.6	
6		0	5	12	3	20
F		0.	25.0	60.0	15.0	14.6
		0.	23.8	13.0	13.0	
		0.	3.6	8.8	2.2	
7		0	0	3	2	5
G		0.	0.	60.0	40.0	3.6
		0.	0.	3.3	8.7	
		0.	0.	2.2	1.5	
COLUMN TOTAL		1	21	92	23	137
		0.7	15.3	67.2	16.8	100.0

(CONTINUED)

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Q177 YEAR COMMISSIONED BY Q168 PAY INCREASES

Q177	Q168 COUNT / ROW PCT / COL PCT / TOT PCT	B 2	C 3	D 4	E 5	ROW TOTAL
H	8	0	3	0	0	3
		0.	100.0	0.	0.	2.2
		0.	14.3	0.	0.	
		0.	2.2	0.	0.	
I	9	0	1	0	0	1
		0.	100.0	0.	0.	0.7
		0.	4.8	0.	0.	
		0.	0.7	0.	0.	
	COLUMN	1	21	92	23	137
	TOTAL	0.7	15.3	67.2	16.8	100.0

RAW CHI SQUARE = 41.26276 WITH 24 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0156
CRAMER'S V = 0.31685
CONTINGENCY COEFFICIENT = 0.48111
LAMBDA (ASYMMETRIC) = 0.05455 WITH Q177 DEPENDENT. = 0.08889 WITH Q168 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06452
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06670 WITH Q177 DEPENDENT. = 0.14644 WITH Q168
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09165
KENDALL'S TAU B = -0.10088. SIGNIFICANCE = 0.0812
GAMMA = -0.15236
SOMERS'S D (ASYMMETRIC) = -0.13156 WITH Q177 DEPENDENT. = -0.07735 WITH Q168 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.09742
ETA = 0.20684 WITH Q177 DEPENDENT. = 0.33724 WITH Q168 DEPENDENT.
PEARSON'S R =-0.14206 SIGNIFICANCE = 0.0489

NUMBER OF MISSING OBSERVATIONS = 3

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * * * *

Q178 RATING BY Q116 BENES INCREASE WITH [illegible]

* PAGE

Q178	COUNT / ROW PCT / COL PCT / TOT PCT	Q116 A 1	B 2	C 3	D 4	ROW TOTAL
A	1	2	24	23	14	63
		3.2	38.1	36.5	22.2	45.0
		50.0	40.0	41.1	70.0	
		1.4	17.1	16.4	10.0	
B	2	1	21	4	1	27
		3.7	77.8	14.8	3.7	19.3
		25.0	35.0	7.1	5.0	
		0.7	15.0	2.9	0.7	
C	3	1	15	29	5	50
		2.0	30.0	58.0	10.0	35.7
		25.0	25.0	51.8	25.0	
		0.7	10.7	20.7	3.6	
	COLUMN TOTAL	4	60	56	20	140
		2.9	42.9	40.0	14.3	100.0

RAW CHI SQUARE = 24.22354 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0005
CRAMER'S V = 0.29413
CONTINGENCY COEFFICIENT = 0.38406
LAMBDA (ASYMMETRIC) = 0.07792 WITH Q178 DEPENDENT. = 0.17500 WITH Q116 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.12739
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.08347 WITH Q178 DEPENDENT. = 0.0786[illegible] WITH Q116
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.08096
KENDALL'S TAU B = -0.00628. SIGNIFICANCE = 0.4672
GAMMA = -0.00962
SOMERS'S D (ASYMMETRIC) = -0.00627 WITH Q178 DEPENDENT. = -0.00629 WITH Q116 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.00628
ETA = 0.21329 WITH Q178 DEPENDENT. = 0.30624 WITH Q116 DEPENDENT.
PEARSON'S R = -0.02606 SIGNIFICANCE = 0.3800

FILE LEE (CREATION DATE = 02-12-81)

* CROSSTABULATION OF *

Q178 RATING BY Q167 FINANCIAL

* PAGE 10

Q178	Q167	A	B	C	D	E	ROW TOTAL
	COUNT						
	ROW PCT						
	COL PCT						
	TOT PCT	1	2	3	4	5	
1		15	16	21	11	0	63
A		23.8	25.4	33.3	17.5	0.	45.0
		45.5	37.2	46.7	68.8	0.	
		10.7	11.4	15.0	7.9	0.	
2		7	6	13	1	0	27
B		25.9	22.2	48.1	3.7	0.	19.3
		21.2	14.0	28.9	6.3	0.	
		5.0	4.3	9.3	0.7	0.	
3		11	21	11	4	3	50
C		22.0	42.0	22.0	8.0	6.0	35.7
		33.3	48.8	24.4	25.0	100.0	
		7.9	15.0	7.9	2.9	2.1	
COLUMN TOTAL		33	43	45	16	3	140
		23.6	30.7	32.1	11.4	2.1	100.0

RAW CHI SQUARE = 16.51428 WITH 8 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0356
CRAMER'S V = 0.24286
CONTINGENCY COEFFICIENT = 0.32483
LAMBDA (ASYMMETRIC) = 0.10390 WITH Q178 DEPENDENT. = 0.10526 WITH Q167 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.10465
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05943 WITH Q178 DEPENDENT. = 0.04439 WITH Q167
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05082
KENDALL'S TAU B = -0.06651. SIGNIFICANCE = 0.1838
GAMMA = -0.09573
SOMERS'S D (ASYMMETRIC) = -0.06179 WITH Q178 DEPENDENT. = -0.07160 WITH Q167 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.06633
ETA = 0.26995 WITH Q178 DEPENDENT. = 0.05968 WITH Q167 DEPENDENT.
PEARSON'S R = -0.04711 SIGNIFICANCE = 0.2902

FILE LEE (CREATION DATE = 02-13-81)

* CROSSTABULATION OF *
Q178 RATING BY Q133 MEDICAL CARE
* PAGE

Q178	COUNT / ROW PCT / COL PCT / TOT PCT	Q133 A	B	C	D	ROW TOTAL
A	1	14	24	23	2	63
		22.2	38.1	36.5	3.2	45.0
		45.2	42.1	63.9	12.5	
		10.0	17.1	16.4	1.4	
B	2	6	12	5	4	27
		22.2	44.4	18.5	14.8	19.3
		19.4	21.1	13.9	25.0	
		4.3	8.6	3.6	2.9	
C	3	11	21	8	10	50
		22.0	42.0	16.0	20.0	35.7
		35.5	36.8	22.2	62.5	
		7.9	15.0	5.7	7.1	
COLUMN TOTAL		31	57	36	16	140
		22.1	40.7	25.7	11.4	100.0

RAW CHI SQUARE = 12.69309 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0482
CRAMER'S V = 0.21291
CONTINGENCY COEFFICIENT = 0.28832
LAMBDA (ASYMMETRIC) = 0.10390 WITH Q178 DEPENDENT. = 0. WITH Q133 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05000
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04654 WITH Q178 DEPENDENT. = 0.03749 WITH Q133
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04153
KENDALL'S TAU B = 0.02656. SIGNIFICANCE = 0.3605
KENDALL'S TAU C = 25.95894. SIGNIFICANCE = 0.0000
GAMMA = 0.03914
SOMERS'S D (ASYMMETRIC) = 0.02515 WITH Q178 DEPENDENT. = 0.02806 WITH Q133 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.02652
ETA = 0.29137 WITH Q178 DEPENDENT. = 0.06415 WITH Q133 DEPENDENT.
PEARSON'S R = 0.06387 SIGNIFICANCE = 0.2267

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * * *

Q127 ADEQUATE COMPENSATION BY Q143 AF BENES

* PAGE

Q127	COUNT / ROW PCT / COL PCT / TOT PCT	Q143 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	0	0	1	1	2
		0.	0.	50.0	50.0	1.4
		0.	0.	1.7	1.4	
		0.	0.	0.7	0.7	
B	2.	1	1	8	2	12
		8.3	8.3	66.7	16.7	8.6
		50.0	16.7	13.8	2.7	
		0.7	0.7	5.7	1.4	
C	3.	0	5	35	32	72
		0.	6.9	48.6	44.4	51.4
		0.	83.3	60.3	43.2	
		0.	3.6	25.0	22.9	
D	4.	1	0	14	39	54
		1.9	0.	25.9	72.2	38.6
		50.0	0.	24.1	52.7	
		0.7	0.	10.0	27.9	
	COLUMN TOTAL	2 / 1.4	6 / 4.3	58 / 41.4	74 / 52.9	140 / 100.0

CHI SQUARE = 22.85734 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0065

CRAMER'S V = 0.23329

CONTINGENCY COEFFICIENT = 0.37464

LAMBDA (ASYMMETRIC) = 0.11765 WITH Q127 DEPENDENT. = 0.13636 WITH Q143 DEPENDENT.

LAMBDA (SYMMETRIC) = 0.12687

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.09025 WITH Q127 DEPENDENT. = 0.09859 WITH Q143

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09424

KENDALL'S TAU B = 0.31981 SIGNIFICANCE = 0.0000

KENDALL'S TAU C = 0.24000 SIGNIFICANCE = 0.0000

GAMMA = 0.53978

SOMERS'S D (ASYMMETRIC) = 0.32910 WITH Q127 DEPENDENT. = 0.31078 WITH Q143 DEPENDENT.

SOMERS'S D (SYMMETRIC) = 0.31968

ETA = 0.32392 WITH Q127 DEPENDENT. = 0.34031 WITH Q143 DEPENDENT.

PEARSON'S R = 0.30457 SIGNIFICANCE = 0.0001

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF *
Q127 ADEQUATE COMPENSATION BY Q158 PAY COMPARABILITY
* PAGE

Q127	Q158 COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	0	0	1	1	2
		0.	0.	50.0	50.0	1.4
		0.	0.	1.8	1.5	
		0.	0.	0.7	0.7	
B	2.	1	3	6	2	12
		8.3	25.0	50.0	16.7	8.6
		100.0	18.8	10.5	3.0	
		0.7	2.1	4.3	1.4	
C	3.	0	11	39	22	72
		0.	15.3	54.2	30.6	51.4
		0.	68.8	68.4	33.3	
		0.	7.9	27.9	15.7	
D	4.	0	2	11	41	54
		0.	3.7	20.4	75.9	38.6
		0.	12.5	19.3	62.1	
		0.	1.4	7.9	29.3	
	COLUMN TOTAL	1	16	57	66	140
		0.7	11.4	40.7	47.1	100.0

CHI SQUARE = 41.62769 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.31482
CONTINGENCY COEFFICIENT = 0.47874
LAMBDA (ASYMMETRIC) = 0.29412 WITH Q127 DEPENDENT. = 0.28378 WITH Q158 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.28873
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.13604 WITH Q127 DEPENDENT. = 0.13294 WITH Q158
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.13447
KENDALL'S TAU B = 0.41946 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.32939 SIGNIFICANCE = 0.0000
GAMMA = 0.64785
SOMERS'S D (ASYMMETRIC) = 0.41251 WITH Q127 DEPENDENT. = 0.42653 WITH Q158 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.41940
ETA = 0.42768 WITH Q127 DEPENDENT. = 0.45882 WITH Q158 DEPENDENT.
PEARSON'S R = 0.40528 SIGNIFICANCE = 0.0000

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q133 MEDICAL CARE BY Q145 MEDICAL AND DENTAL INSURANCE
* PAGE

Q133	COUNT / ROW PCT / COL PCT / TOT PCT	Q145 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	3 10.7 20.0 2.3	3 10.7 8.6 2.3	10 35.7 19.2 7.6	12 42.9 40.0 9.1	28 21.2
B	2.	3 5.7 20.0 2.3	12 22.6 34.3 9.1	26 49.1 50.0 19.7	12 22.6 40.0 9.1	53 40.2
C	3.	6 17.1 40.0 4.5	15 42.9 42.9 11.4	11 31.4 21.2 8.3	3 8.6 10.0 2.3	35 26.5
D	4.	3 18.8 20.0 2.3	5 31.3 14.3 3.8	5 31.3 9.6 3.8	3 18.8 10.0 2.3	16 12.1
	COLUMN TOTAL	15 11.4	35 26.5	52 39.4	30 22.7	132 100.0

CHI SQUARE = 20.29642 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0162
CRAMER'S V = 0.22639
CONTINGENCY COEFFICIENT = 0.36506
LAMBDA (ASYMMETRIC) = 0.07595 WITH Q133 DEPENDENT. = 0.07500 WITH Q145 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.07547
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05963 WITH Q133 DEPENDENT. = 0.05964 WITH Q145
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05963
KENDALL'S TAU B = -0.27006 SIGNIFICANCE = 0.0001
KENDALL'S TAU C = -0.25543 SIGNIFICANCE = 0.0001
GAMMA = -0.37130
SOMERS'S D (ASYMMETRIC) = -0.26985 WITH Q133 DEPENDENT. = -0.27028 WITH Q145 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.27006
ETA = 0.29913 WITH Q133 DEPENDENT. = 0.32440 WITH Q145 DEPENDENT.
PEARSON'S R =-0.28252 SIGNIFICANCE = 0.0005

NUMBER OF MISSING OBSERVATIONS = 8

Q124	COUNT / ROW PCT / COL PCT / TOT PCT	Q172 A 1.	B 2.	C 3.	D 4.	E 5.	F 6.	G 7.	ROW TOTAL
1.		1	0	0	1	1	2	1	6
A		16.7	0.	0.	16.7	16.7	33.3	16.7	4.3
		4.5	0.	0.	4.5	8.3	13.3	3.3	
		0.7	0.	0.	0.7	0.7	1.4	0.7	
2.		1	4	2	6	0	3	3	19
B		5.3	21.1	10.5	31.6	0.	15.8	15.8	13.7
		4.5	15.4	16.7	27.3	0.	20.0	10.0	
		0.7	2.9	1.4	4.3	0.	2.2	2.2	
3.		8	14	6	4	2	5	18	57
C		14.0	24.6	10.5	7.0	3.5	8.8	31.6	41.0
		36.4	53.8	50.0	18.2	16.7	33.3	60.0	
		5.8	10.1	4.3	2.9	1.4	3.6	12.9	
4.		12	8	4	11	9	5	8	57
D		21.1	14.0	7.0	19.3	15.8	8.8	14.0	41.0
		54.5	30.8	33.3	50.0	75.0	33.3	26.7	
		8.6	5.8	2.9	7.9	6.5	3.6	5.8	
COLUMN TOTAL		22 / 15.8	26 / 18.7	12 / 8.6	22 / 15.8	12 / 8.6	15 / 10.8	30 / 21.6	139 / 100.0

CHI SQUARE = 27.95135 WITH 18 DEGREES OF FREEDOM SIGNIFICANCE = 0.0628
CRAMER'S V = 0.25890
CONTINGENCY COEFFICIENT = 0.40917
LAMBDA (ASYMMETRIC) = 0.21951 WITH Q124 DEPENDENT. = 0.07339 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.13613
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.09546 WITH Q124 DEPENDENT. = 0.05748 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07176
KENDALL'S TAU B = -0.08357 SIGNIFICANCE = 0.1181
KENDALL'S TAU C = -0.08198 SIGNIFICANCE = 0.1181
GAMMA = -0.11174
SOMERS'S D (ASYMMETRIC) = -0.07304 WITH Q124 DEPENDENT. = -0.09561 WITH Q172 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.08282
ETA = 0.22523 WITH Q124 DEPENDENT. = 0.11340 WITH Q172 DEPENDENT.
PEARSON'S R = -0.10157 SIGNIFICANCE = 0.1171

NUMBER OF MISSING OBSERVATIONS = 1

Q167	COUNT / ROW PCT / COL PCT / TOT PCT	Q172 A	B	C	D	E	F	G	ROW TOTAL
		1.	2.	3.	4.	5.	6.	7.	
A	1.	7	7	1	6	4	2	6	33
		21.2	21.2	3.0	18.2	12.1	6.1	18.2	23.6
		31.8	26.9	7.7	27.3	33.3	13.3	20.0	
		5.0	5.0	0.7	4.3	2.9	1.4	4.3	
B	2.	6	5	4	7	4	7	10	43
		14.0	11.6	9.3	16.3	9.3	16.3	23.3	30.7
		27.3	19.2	30.8	31.8	33.3	46.7	33.3	
		4.3	3.6	2.9	5.0	2.9	5.0	7.1	
C	3.	8	12	7	5	3	4	6	45
		17.8	26.7	15.6	11.1	6.7	8.9	13.3	32.1
		36.4	46.2	53.8	22.7	25.0	26.7	20.0	
		5.7	8.6	5.0	3.6	2.1	2.9	4.3	
D	4.	0	2	1	3	1	2	7	16
		0.	12.5	6.3	18.8	6.3	12.5	43.8	11.4
		0.	7.7	7.7	13.6	8.3	13.3	23.3	
		0.	1.4	0.7	2.1	0.7	1.4	5.0	
E	5.	1	0	0	1	0	0	1	3
		33.3	0.	0.	33.3	0.	0.	33.3	2.1
		4.5	0.	0.	4.5	0.	0.	3.3	
		0.7	0.	0.	0.7	0.	0.	0.7	
COLUMN TOTAL		22	26	13	22	12	15	30	140
		15.7	18.6	9.3	15.7	8.6	10.7	21.4	100.0

CHI SQUARE = 21.81737 WITH 24 DEGREES OF FREEDOM SIGNIFICANCE = 0.5902
CRAMER'S , = 0.19738
CONTINGENCY COEFFICIENT = 0.36719
LAMBDA (ASYMMETRIC) = 0.10526 WITH Q167 DEPENDENT. = 0.06364 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08293
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06363 WITH Q167 DEPENDENT. = 0.04695 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05404
KENDALL'S TAU B = 0.05672 SIGNIFICANCE = 0.2028
KENDALL'S TAU C = 0.05574 SIGNIFICANCE = 0.2028
GAMMA = 0.07172
SOMERS'S D (ASYMMETRIC) = 0.05291 WITH Q167 DEPENDENT. = 0.06081 WITH Q172 DEPENDENT.

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * *

Q168 PAY INCREASES BY Q172 EXTRA INCOME

* PAGE

Q168		Q172 A	B	C	D	E	F	G	ROW TOTAL
		1.	2.	3.	4.	5.	6.	7.	
	2.	0	0	0	0	1	0	0	1
B		0.	0.	0.	0.	100.0	0.	0.	0.7
		0.	0.	0.	0.	8.3	0.	0.	
		0.	0.	0.	0.	0.7	0.	0.	
	3.	2	4	2	3	1	5	6	23
C		8.7	17.4	8.7	13.0	4.3	21.7	26.1	16.4
		9.1	15.4	15.4	13.6	8.3	33.3	20.0	
		1.4	2.9	1.4	2.1	0.7	3.6	4.3	
	4.	17	18	8	15	8	7	20	93
D		18.3	19.4	8.6	16.1	8.6	7.5	21.5	66.4
		77.3	69.2	61.5	68.2	66.7	46.7	66.7	
		12.1	12.9	5.7	10.7	5.7	5.0	14.3	
	5.	3	4	3	4	2	3	4	23
E		13.0	17.4	13.0	17.4	8.7	13.0	17.4	16.4
		13.6	15.4	23.1	18.2	16.7	20.0	13.3	
		2.1	2.9	2.1	2.9	1.4	2.1	2.9	
	COLUMN TOTAL	22	26	13	22	12	15	30	140
		15.7	18.6	9.3	15.7	8.6	10.7	21.4	100.0

CHI SQUARE = 17.00253 WITH 18 DEGREES OF FREEDOM SIGNIFICANCE = 0.5229
CRAMER'S V = 0.20120
CONTINGENCY COEFFICIENT = 0.32908
LAMBDA (ASYMMETRIC) = 0. WITH Q168 DEPENDENT. = 0.00909 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.00637
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04338 WITH Q168 DEPENDENT. = 0.02061 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02795
KENDALL'S TAU B = -0.06384 SIGNIFICANCE = 0.1859
KENDALL'S TAU C = -0.05551 SIGNIFICANCE = 0.1859
GAMMA = -0.09714
SOMERS'S D (ASYMMETRIC) = -0.04940 WITH Q168 DEPENDENT. = -0.08249 WITH Q172 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.06179
ETA = 0.11162 WITH Q168 DEPENDENT. = 0.12434 WITH Q172 DEPENDENT.
PEARSON'S R = -0.08271 SIGNIFICANCE = 0.1657

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF *
Q173 GRADE BY Q117 DEPENDENT DENTAL CARE
* PAGE

Q173	Q117 COUNT / ROW PCT / COL PCT / TOT PCT	1.	2.	3.	ROW TOTAL
1.		25	32	7	64
A		39.1	50.0	10.9	45.7
		35.7	57.1	50.0	
		17.9	22.9	5.0	
3.		45	24	7	76
C		59.2	31.6	9.2	54.3
		64.3	42.9	50.0	
		32.1	17.1	5.0	
COLUMN TOTAL		70	56	14	140
		50.0	40.0	10.0	100.0

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CHI SQUARE = 5.87171 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0531
CRAMER'S V = 0.20479
CONTINGENCY COEFFICIENT = 0.20063
LAMBDA (ASYMMETRIC) = 0.12500 WITH Q173 DEPENDENT. = 0.10000 WITH Q117 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.11194
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03062 WITH Q173 DEPENDENT. = 0.02238 WITH Q117
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02586
KENDALL'S TAU B = -0.17573 SIGNIFICANCE = 0.0159
KENDALL'S TAU C = -0.18857 SIGNIFICANCE = 0.0159
GAMMA = -0.31622
SOMERS'S D (ASYMMETRIC) = -0.16256 WITH Q173 DEPENDENT. = -0.18997 WITH Q117 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.17520
ETA = 0.20479 WITH Q173 DEPENDENT. = 0.16428 WITH Q117 DEPENDENT.
PEARSON'S R =-0.16428 SIGNIFICANCE = 0.0262

Q168	COUNT / ROW PCT / COL PCT / TOT PCT	Q172 A 1.	B 2.	C 3.	D 4.	E 5.	F 6.	G 7.	ROW TOTAL
B	2.	0	0	0	0	1	0	0	1
		0.	0.	0.	0.	100.0	0.	0.	0.7
		0.	0.	0.	0.	8.3	0.	0.	
		0.	0.	0.	0.	0.7	0.	0.	
C	3.	2	4	2	3	1	5	6	23
		8.7	17.4	8.7	13.0	4.3	21.7	26.1	16.4
		9.1	15.4	15.4	13.6	8.3	33.3	20.0	
		1.4	2.9	1.4	2.1	0.7	3.6	4.3	
D	4.	17	18	8	15	8	7	20	93
		18.3	19.4	8.6	16.1	8.6	7.5	21.5	66.4
		77.3	69.2	61.5	68.2	66.7	46.7	66.7	
		12.1	12.9	5.7	10.7	5.7	5.0	14.3	
E	5.	3	4	3	4	2	3	4	23
		13.0	17.4	13.0	17.4	8.7	13.0	17.4	16.4
		13.6	15.4	23.1	18.2	16.7	20.0	13.3	
		2.1	2.9	2.1	2.9	1.4	2.1	2.9	
COLUMN TOTAL		22	26	13	22	12	15	30	140
		15.7	18.6	9.3	15.7	8.6	10.7	21.4	100.0

CHI SQUARE = 17.00253 WITH 18 DEGREES OF FREEDOM SIGNIFICANCE = 0.5229
CRAMER'S V = 0.20120
CONTINGENCY COEFFICIENT = 0.32908
LAMBDA (ASYMMETRIC) = 0. WITH Q168 DEPENDENT. = 0.00909 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.00637
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04338 WITH Q168 DEPENDENT. = 0.02061 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02795
KENDALL'S TAU B = -0.06384 SIGNIFICANCE = 0.1859
KENDALL'S TAU C = -0.05551 SIGNIFICANCE = 0.1859
GAMMA = -0.09714
SOMERS'S D (ASYMMETRIC) = -0.04940 WITH Q168 DEPENDENT. = -0.08249 WITH Q172 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.06179
ETA = 0.11162 WITH Q168 DEPENDENT. = 0.12434 WITH Q172 DEPENDENT.
PEARSON'S R = -0.08271 SIGNIFICANCE = 0.1657

* CROSSTABULATION OF *

Q175 AGE BY Q167 FINANCIAL

Q175	COUNT / ROW PCT / COL PCT / TOT PCT	Q167 1.	2.	3.	4.	5.	ROW TOTAL
A	1.	12	14	6	2	1	35
		34.3	40.0	17.1	5.7	2.9	25.0
		36.4	32.6	13.3	12.5	33.3	
		8.6	10.0	4.3	1.4	0.7	
B	2.	16	19	21	8	2	66
		24.2	28.8	31.8	12.1	3.0	47.1
		48.5	44.2	46.7	50.0	66.7	
		11.4	13.6	15.0	5.7	1.4	
C	3.	5	9	10	1	0	25
		20.0	36.0	40.0	4.0	0.	17.9
		15.2	20.9	22.2	6.3	0.	
		3.6	6.4	7.1	0.7	0.	
D	4.	0	1	6	4	0	11
		0.	9.1	54.5	36.4	0.	7.9
		0.	2.3	13.3	25.0	0.	
		0.	0.7	4.3	2.9	0.	
E	5.	0	0	2	1	0	3
		0.	0.	66.7	33.3	0.	2.1
		0.	0.	4.4	6.3	0.	
		0.	0.	1.4	0.7	0.	
COLUMN TOTAL		33	43	45	16	3	140
		23.6	30.7	32.1	11.4	2.1	100.0

CHI SQUARE = 25.44082 WITH 16 DEGREES OF FREEDOM SIGNIFICANCE = 0.0624
CRAMER'S V = 0.21314
CONTINGENCY COEFFICIENT = 0.39214
LAMBDA (ASYMMETRIC) = 0. WITH Q175 DEPENDENT. = 0.08421 WITH Q167 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04734
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.07941 WITH Q175 DEPENDENT. = 0.07332 WITH Q167 DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07625
KENDALL'S TAU B = 0.23119 SIGNIFICANCE = 0.0007
KENDALL'S TAU C = 0.20357 SIGNIFICANCE = 0.0007
GAMMA = 0.32545
SOMERS'S D (ASYMMETRIC) = 0.22210 WITH Q175 DEPENDENT. = 0.24065 WITH Q167 DEPENDENT.

FILE LEE (CREATION DATE = 02-10-81)

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q173 GRADE BY Q117 DEPENDENT DENTAL CARE
* PAGE

Q173	COUNT / ROW PCT / COL PCT / TOT PCT	Q117: A 1.	B 2.	C 3.	ROW TOTAL
A	1.	25	32	7	64
		39.1	50.0	10.9	45.7
		35.7	57.1	50.0	
		17.9	22.9	5.0	
C	3.	45	24	7	76
		59.2	31.6	9.2	54.3
		64.3	42.9	50.0	
		32.1	17.1	5.0	
	COLUMN TOTAL	70	56	14	140
		50.0	40.0	10.0	100.0

CHI SQUARE = 5.87171 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0531
CRAMER'S V = 0.20479
CONTINGENCY COEFFICIENT = 0.20063
LAMBDA (ASYMMETRIC) = 0.12500 WITH Q173 DEPENDENT. = 0.10000 WITH Q117 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.11194
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03062 WITH Q173 DEPENDENT. = 0.02238 WITH Q117
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02586
KENDALL'S TAU B = -0.17573 SIGNIFICANCE = 0.0159
KENDALL'S TAU C = -0.18857 SIGNIFICANCE = 0.0159
GAMMA = -0.31622
SOMERS'S D (ASYMMETRIC) = -0.16256 WITH Q173 DEPENDENT. = -0.18997 WITH Q117 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.17520
ETA = 0.20479 WITH Q173 DEPENDENT. = 0.16428 WITH Q117 DEPENDENT.
PEARSON'S R =-0.16428 SIGNIFICANCE = 0.0262

APPENDIX D

FAMILY CONSIDERATIONS CROSSTABS

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q148 ASSIGNMENT STABILITY
* PAGE

Q173	COUNT / ROW PCT / COL PCT / TOT PCT	Q148 A 1.	Q148 B 2.	Q148 C 3.	ROW TOTAL
A	1.	7	47	10	64
		10.9	73.4	15.6	45.7
		25.0	49.0	62.5	
		5.0	33.6	7.1	
C	3.	21	49	6	76
		27.6	64.5	7.9	54.3
		75.0	51.0	37.5	
		15.0	35.0	4.3	
	COLUMN TOTAL	28 / 20.0	96 / 68.6	16 / 11.4	140 / 100.0

117

CHI SQUARE = 7.06500 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0292
CRAMER'S V = 0.22464
CONTINGENCY COEFFICIENT = 0.21918
LAMBDA (ASYMMETRIC) = 0.06250 WITH Q173 DEPENDENT. = 0. WITH Q148 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.03704
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03806 WITH Q173 DEPENDENT. = 0.03166 WITH Q148
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03458
KENDALL'S TAU B = -0.21397 SIGNIFICANCE = 0.0045
KENDALL'S TAU C = -0.20816 SIGNIFICANCE = 0.0045
GAMMA = -0.43331
SOMERS'S D (ASYMMETRIC) = -0.21832 WITH Q173 DEPENDENT. = -0.20970 WITH Q148 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.21393
ETA = 0.22464 WITH Q173 DEPENDENT. = 0.21962 WITH Q148 DEPENDENT.
PEARSON'S R =-0.21962 SIGNIFICANCE = 0.0046

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF *
Q173 GRADE BY Q129 WIFE WORKS
* PAGE

Q173	Q129 COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
1.		11	22	25	2	60
A		18.3	36.7	41.7	3.3	45.5
		31.4	42.3	64.1	33.3	
		8.3	16.7	18.9	1.5	
3.		24	30	14	4	72
C		33.3	41.7	19.4	5.6	54.5
		68.6	57.7	35.9	66.7	
		18.2	22.7	10.6	3.0	
COLUMN TOTAL		35	52	39	6	132
		26.5	39.4	29.5	4.5	100.0

CHI SQUARE = 8.81048 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0319
CRAMER'S V = 0.25835
CONTINGENCY COEFFICIENT = 0.25014
LAMBDA (ASYMMETRIC) = 0.18333 WITH Q173 DEPENDENT. = 0.03750 WITH Q129 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.10000
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04901 WITH Q173 DEPENDENT. = 0.02768 WITH Q129
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03538
KENDALL'S TAU B = -0.19496 SIGNIFICANCE = 0.0084
KENDALL'S TAU C = -0.22727 SIGNIFICANCE = 0.0084
GAMMA = -0.32587
SOMERS'S D (ASYMMETRIC) = -0.16586 WITH Q173 DEPENDENT. = -0.22917 WITH Q129 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.19244
ETA = 0.25835 WITH Q173 DEPENDENT. = 0.19132 WITH Q129 DEPENDENT.
PEARSON'S R =-0.19132 SIGNIFICANCE = 0.0140

NUMBER OF MISSING OBSERVATIONS = 8

FILE LEE (CREATION DATE = 02-09-81)

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * * * *
Q115 POSITIVE FAMILY EFFECT BY Q144 FAMILY CONTINUE CAREER
* PAGE

Q115	COUNT / ROW PCT / COL PCT / TOT PCT	Q144 A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
A	1.	6	17	3	1	27
		22.2	63.0	11.1	3.7	20.3
		60.0	21.3	9.1	10.0	
		4.5	12.8	2.3	0.8	
B	2.	3	57	24	4	88
		3.4	64.8	27.3	4.5	66.2
		30.0	71.3	72.7	40.0	
		2.3	42.9	18.0	3.0	
C	3.	1	5	6	4	16
		6.3	31.3	37.5	25.0	12.0
		10.0	6.3	18.2	40.0	
		0.8	3.8	4.5	3.0	
D	4.	0	1	0	1	2
		0.	50.0	0.	50.0	1.5
		0.	1.3	0.	10.0	
		0.	0.8	0.	0.8	
	COLUMN TOTAL	10	80	33	10	133
		7.5	60.2	24.8	7.5	100.0

CHI SQUARE = 29.18144 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0006
CRAMER'S V = 0.27044
CONTINGENCY COEFFICIENT = 0.42418
LAMBDA (ASYMMETRIC) = 0.06667 WITH Q115 DEPENDENT. = 0.01887 WITH Q144 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04082
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.09697 WITH Q115 DEPENDENT. = 0.06852 WITH Q144
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09073
KENDALL'S TAU B = 0.30855 SIGNIFICANCE = 0.0001
KENDALL'S TAU C = 0.22010 SIGNIFICANCE = 0.0001
GAMMA = 0.52784
SOMERS'S D (ASYMMETRIC) = 0.29200 WITH Q115 DEPENDENT. = 0.32604 WITH Q144 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.30808
ETA = 0.34864 WITH Q115 DEPENDENT. = 0.34562 WITH Q144 DEPENDENT.
PEARSON'S R = 0.34258 SIGNIFICANCE = 0.0000

Q144	COUNT / ROW PCT / COL PCT / TOT PCT	Q164: A 1.	B 2.	C 3.	D 4.	E 5.	ROW TOTAL
A	1.	3	4	3	0	0	10
		30.0	40.0	30.0	0.	0.	7.5
		30.0	16.0	4.3	0.	0.	
		2.3	3.0	2.3	0.	0.	
B	2.	7	18	45	8	2	80
		8.8	22.5	56.3	10.0	2.5	60.2
		70.0	72.0	64.3	42.1	22.2	
		5.3	13.5	33.8	6.0	1.5	
C	3.	0	3	17	8	5	33
		0.	9.1	51.5	24.2	15.2	24.8
		0.	12.0	24.3	42.1	55.6	
		0.	2.3	12.8	6.0	3.8	
D	4.	0	0	5	3	2	10
		0.	0.	50.0	30.0	20.0	7.5
		0.	0.	7.1	15.8	22.2	
		0.	0.	3.8	2.3	1.5	
	COLUMN TOTAL	10	25	70	19	9	133
		7.5	18.8	52.6	14.3	6.8	100.0

CHI SQUARE = 33.13935 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0009
CRAMER'S V = 0.28819
CONTINGENCY COEFFICIENT = 0.44662
LAMBDA (ASYMMETRIC) = 0.05660 WITH Q144 DEPENDENT. = 0.01587 WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.03448
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.12849 WITH Q144 DEPENDENT. = 0.10233 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.11393
KENDALL'S TAU B = 0.41389 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.33633 SIGNIFICANCE = 0.0000
GAMMA = 0.65063
SOMERS'S D (ASYMMETRIC) = 0.38393 WITH Q144 DEPENDENT. = 0.44620 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.41273
ETA = 0.45939 WITH Q144 DEPENDENT. = 0.46853 WITH Q164 DEPENDENT.
PEARSON'S R = 0.45762 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 7

CROSSTABULATION OF Q129 WIFE WORKS BY Q167 FINANCIAL

Q129	COUNT / ROW PCT / COL PCT / TOT PCT	Q167 A 1.	B 2.	C 3.	D 4.	E 5.	ROW TOTAL
A	1.	12	17	4	1	1	35
		34.3	48.6	11.4	2.9	2.9	26.5
		37.5	40.5	10.0	6.7	33.3	
		9.1	12.9	3.0	0.8	0.8	
B	2.	16	15	19	2	0	52
		30.8	28.8	36.5	3.8	0.	39.4
		50.0	35.7	47.5	13.3	0.	
		12.1	11.4	14.4	1.5	0.	
C	3.	4	10	16	9	0	39
		10.3	25.6	41.0	23.1	0.	29.5
		12.5	23.8	40.0	60.0	0.	
		3.0	7.6	12.1	6.8	0.	
D	4.	0	0	1	3	2	6
		0.	0.	16.7	50.0	33.3	4.5
		0.	0.	2.5	20.0	66.7	
		0.	0.	0.8	2.3	1.5	
	COLUMN TOTAL	32	42	40	15	3	132
		24.2	31.8	30.3	11.4	2.3	100.0

CHI SQUARF = 64.20543 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.40266
CONTINGENCY COEFFICIENT = 0.57205
LAMBDA (ASYMMETRIC) = 0.13750 WITH Q129 DEPENDENT. = 0.14444 WITH Q167 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.14118
UNCFRTAINTY COEFFICIENT (ASYMMFTRIC) = 0.15449 WITH Q129 DEPENDENT. = 0.13432 WITH Q167
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.14370
KENDALL'S TAU B = 0.38083 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.36027 SIGNIFICANCE = 0.0000
GAMMA = 0.51850
SOMERS'S D (ASYMMETRIC) = 0.36776 WITH Q129 DEPENDENT. = 0.39437 WITH Q167 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.38060
ETA = 0.48067 WITH Q129 DEPENDENT. = 0.50100 WITH Q167 DEPENDENT.
PEARSON'S R = 0.45596 SIGNIFICANCE = 0.0000

FILE LEE (CREATION DATE = 02-09-81)

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q129 WIFE WORKS BY Q172 EXTRA INCOME
* PAGE

Q129	COUNT / ROW PCT / COL PCT / TOT PCT	Q172 A	B	C	D	E	F	G	ROW TOTAL
		1.	2.	3.	4.	5.	6.	7.	
1.		6	2	2	6	4	5	10	35
A		17.1	5.7	5.7	17.1	11.4	14.3	28.6	26.5
		31.6	8.3	16.7	27.3	36.4	35.7	33.3	
		4.5	1.5	1.5	4.5	3.0	3.8	7.6	
2.		8	10	6	9	5	6	8	52
B		15.4	19.2	11.5	17.3	9.6	11.5	15.4	39.4
		42.1	41.7	50.0	40.9	45.5	42.9	26.7	
		6.1	7.6	4.5	6.8	3.8	4.5	6.1	
3.		4	12	4	6	1	2	10	39
C		10.3	30.8	10.3	15.4	2.6	5.1	25.6	29.5	
		21.1	50.0	33.3	27.3	9.1	14.3	33.3	
		3.0	9.1	3.0	4.5	0.8	1.5	7.6	
4.		1	0	0	1	1	1	2	6
D		16.7	0.	0.	16.7	16.7	16.7	33.3	4.5
		5.3	0.	0.	4.5	9.1	7.1	6.7	
		0.8	0.	0.	0.8	0.8	0.8	1.5	
COLUMN TOTAL		19	24	12	22	11	14	30	132
		14.4	18.2	9.1	16.7	8.3	10.6	22.7	100.0

CHI SQUARE = 16.22461 WITH 18 DEGREES OF FREEDOM SIGNIFICANCE = 0.5769
CRAMER'S V = 0.20241
CONTINGENCY COEFFICIENT = 0.33085
LAMBDA (ASYMMETRIC) = 0.05000 WITH Q129 DEPENDENT. = 0.03922 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04396
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05944 WITH Q129 DEPENDENT. = 0.03841 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04667
KENDALL'S TAU B = -0.05688 SIGNIFICANCE = 0.2135
KENDALL'S TAU C = -0.05755 SIGNIFICANCE = 0.2135
GAMMA = -0.07440
SOMERS'S D (ASYMMETRIC) = -0.05136 WITH Q129 DEPENDENT. = -0.06299 WITH Q172 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.05658
ETA = 0.18918 WITH Q129 DEPENDENT. = 0.17362 WITH Q172 DEPENDENT.
PEARSON'S R =-0.05947 SIGNIFICANCE = 0.2491

Q142	COUNT / ROW PCT / COL PCT / TOT PCT	Q148 A (1.)	Q148 B (2.)	Q148 C (3.)	ROW TOTAL
A	1.	17	6	0	23
		73.9	26.1	0.	16.4
		60.7	6.3	0.	
		12.1	4.3	0.	
B	2.	8	43	0	51
		15.7	84.3	0.	36.4
		28.6	44.8	0.	
		5.7	30.7	0.	
C	3.	3	44	16	63
		4.8	69.8	25.4	45.0
		10.7	45.8	100.0	
		2.1	31.4	11.4	
D	4.	0	3	0	3
		0.	100.0	0.	2.1
		0.	3.1	0.	
		0.	2.1	0.	
	COLUMN TOTAL	28	96	16	140
		20.0	68.6	11.4	100.0

CHI SQUARE = 69.71459 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.49898
CONTINGENCY COEFFICIENT = 0.57656
LAMBDA (ASYMMETRIC) = 0.18182 WITH Q142 DEPENDENT. = 0.25000 WITH Q148 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.20661
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.21808 WITH Q142 DEPENDENT. = 0.29120 WITH Q148
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.24939
KENDALL'S TAU B = 0.52870 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.43714 SIGNIFICANCE = 0.0000
GAMMA = 0.85458
SOMERS'S D (ASYMMETRIC) = 0.61130 WITH Q142 DEPENDENT. = 0.45725 WITH Q148 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.52317
ETA = 0.58176 WITH Q142 DEPENDENT. = 0.60008 WITH Q148 DEPENDENT.
PEARSON'S R = 0.56875 SIGNIFICANCE = 0.0000

FILE LEE (CREATION DATE = 02-10-81)

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q144 FAMILY CONTINUE CAREER
* PAGE

	Q144				
COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	D	ROW TOTAL
	1.	2.	3.	4.	
Q173					
1. A	8	37	12	4	61
	13.1	60.7	19.7	6.6	45.9
	80.0	46.3	36.4	40.0	
	6.0	27.8	9.0	3.0	
3. C	2	43	21	6	72
	2.8	59.7	29.2	8.3	54.1
	20.0	53.8	63.6	60.0	
	1.5	32.3	15.8	4.5	
COLUMN TOTAL	10	80	33	10	133
	7.5	60.2	24.8	7.5	100.0

CHI SQUARE = 6.03606 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.1099
CRAMER'S V = 0.21303
CONTINGENCY COEFFICIENT = 0.20836
LAMBDA (ASYMMETRIC) = 0.09836 WITH Q173 DEPENDENT. = 0. WITH Q144 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05263
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03425 WITH Q173 DEPENDENT. = 0.02270 WITH Q144
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02730
KENDALL'S TAU B = 0.16069 SIGNIFICANCE = 0.0261
KENDALL'S TAU C = 0.17028 SIGNIFICANCE = 0.0261
GAMMA = 0.30012
SOMERS'S D (ASYMMETRIC) = 0.15060 WITH Q173 DEPENDENT. = 0.17145 WITH Q144 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.16035
ETA = 0.21303 WITH Q173 DEPENDENT. = 0.16165 WITH Q144 DEPENDENT.
PEARSON'S R = 0.16165 SIGNIFICANCE = 0.0315

NUMBER OF MISSING OBSERVATIONS = 7

Q175		Q144 1.	2.	3.	4.	ROW TOTAL
	1.	0	18	11	3	32
A		0.	56.3	34.4	9.4	24.1
		0.	22.5	33.3	30.0	
		0.	13.5	8.3	2.3	
	2.	5	37	16	6	64
B		7.8	57.8	25.0	9.4	48.1
		50.0	46.3	48.5	60.0	
		3.8	27.8	12.0	4.5	
	3.	2	17	4	1	24
C		8.3	70.8	16.7	4.2	18.0
		20.0	21.3	12.1	10.0	
		1.5	12.8	3.0	0.8	
	4.	2	7	2	0	11
D		18.2	63.6	18.2	0.	8.3
		20.0	8.8	6.1	0.	
		1.5	5.3	1.5	0.	
	5.	1	1	0	0	2
E		50.0	50.0	0.	0.	1.5
		10.0	1.3	0.	0.	
		0.8	0.8	0.	0.	
COLUMN TOTAL		10	80	33	10	133
		7.5	60.2	24.8	7.5	100.0

CHI SQUARE = 13.83854 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.3111
CRAMER'S V = 0.18623
CONTINGENCY COEFFICIENT = 0.30699
LAMBDA (ASYMMETRIC) = 0. WITH Q175 DEPENDENT. = 0. WITH Q144 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04289 WITH Q175 DEPENDENT. = 0.05245 WITH Q144
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04720
KENDALL'S TAU B = -0.21369 SIGNIFICANCE = 0.0027
KENDALL'S TAU C = -0.17548 SIGNIFICANCE = 0.0027
GAMMA = -0.34809
SOMERS'S D (ASYMMETRIC) = -0.23280 WITH Q175 DEPENDENT. = -0.19616 WITH Q144 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.21341

Q176 \ Q144	A	B	C	D	ROW TOTAL
1.	6	14	6	1	27
	22.2	51.9	22.2	3.7	20.3
	60.0	17.5	18.2	10.0	
	4.5	10.5	4.5	0.8	
2.	1	27	5	2	35
	2.9	77.1	14.3	5.7	26.3
	10.0	33.8	15.2	20.0	
	0.8	20.3	3.8	1.5	
3.	3	35	19	6	63
	4.8	55.6	30.2	9.5	47.4
	30.0	43.8	57.6	60.0	
	2.3	26.3	14.3	4.5	
4.	0	4	3	1	8
	0.	50.0	37.5	12.5	6.0
	0.	5.0	9.1	10.0	
	0.	3.0	2.3	0.8	
COLUMN TOTAL	10 7.5	80 60.2	33 24.8	10 7.5	133 100.0

CHI SQUARE = 16.51673 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0568
CRAMER'S V = 0.20346
CONTINGENCY COEFFICIENT = 0.33237
LAMBDA (ASYMMETRIC) = 0.04286 WITH Q176 DEPENDENT. = 0. WITH Q144 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.02439
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04693 WITH Q176 DEPENDENT. = 0.05402 WITH Q144
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05023
KENDALL'S TAU B = 0.20873 SIGNIFICANCE = 0.0035
KENDALL'S TAU C = 0.17020 SIGNIFICANCE = 0.0035
GAMMA = 0.33712
SOMERS'S D (ASYMMETRIC) = 0.22580 WITH Q176 DEPENDENT. = 0.19296 WITH Q144 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.20809
ETA = 0.22091 WITH Q176 DEPENDENT. = 0.22964 WITH Q144 DEPENDENT.
PEARSON'S R = 0.22693 SIGNIFICANCE = 0.0040

NUMBER OF MISSING OBSERVATIONS = 7

APPENDIX E

SOCIAL LIFE/CAMARADERIE CROSSTABS

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q176 YEARS TO RETIREMENT BY Q156 BEST ORGANIZATION
* PAGE

Q176	COUNT / ROW PCT / COL PCT / TOT PCT	Q156 A 1.	B 2.	C 3.	ROW TOTAL
1.		21	7	0	28
A		75.0	25.0	0.	20.0
		31.8	11.3	0.	
		15.0	5.0	0.	
2.		18	15	3	36
B		50.0	41.7	8.3	25.7
		27.3	24.2	25.0	
		12.9	10.7	2.1	
3.		26	35	6	67
C		38.8	52.2	9.0	47.9
		39.4	56.5	50.0	
		18.6	25.0	4.3	
4.		1	5	3	9
D		11.1	55.6	33.3	6.4
		1.5	8.1	25.0	
		0.7	3.6	2.1	
COLUMN TOTAL		66 47.1	62 44.3	12 8.6	140 100.0

CHI SQUARE = 20.61219 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.0022
CRAMER'S V = 0.27132
CONTINGENCY COEFFICIENT = 0.35824
LAMBDA (ASYMMETRIC) = 0. WITH Q176 DEPENDENT. = 0.17568 WITH Q156 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08844
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06281 WITH Q176 DEPENDENT. = 0.06143 WITH Q156
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07092
KENDALL'S TAU B = 0.30298 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.27995 SIGNIFICANCE = 0.0000
GAMMA = 0.47967
SOMERS'S D (ASYMMETRIC) = 0.32498 WITH Q176 DEPENDENT. = 0.28247 WITH Q156 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.30224
ETA = 0.34494 WITH Q176 DEPENDENT. = 0.36427 WITH Q156 DEPENDENT.
PEARSON'S R = 0.34376 SIGNIFICANCE = 0.0000

Q177	COUNT / ROW PCT / COL PCT / TOT PCT	Q156 A: 1	Q156 B: 2	Q156 C: 3	ROW TOTAL
A	1	10	3	0	13
		76.9	23.1	0.	9.5
		15.9	4.8	0.	
		7.3	2.2	0.	
B	2	12	10	0	22
		54.5	45.5	0.	16.1
		19.0	16.1	0.	
		8.8	7.3	0.	
C	3	15	8	3	26
		57.7	30.8	11.5	19.0
		23.8	12.9	25.0	
		10.9	5.8	2.2	
D	4	7	12	1	20
		35.0	60.0	5.0	14.6
		11.1	19.4	8.3	
		5.1	8.8	0.7	
E	5	14	12	1	27
		51.9	44.4	3.7	19.7
		22.2	19.4	8.3	
		10.2	8.8	0.7	
F	6	4	12	4	20
		20.0	60.0	20.0	14.6
		6.3	19.4	33.3	
		2.9	8.8	2.9	
G	7	1	2	2	5
		20.0	40.0	40.0	3.6
		1.6	3.2	16.7	
		0.7	1.5	1.5	
*	COLUMN TOTAL	63	62	12	137
		46.0	45.3	8.8	100.0

(CONTINUED)

FILE LEE (CREATION DATE = 02-12-81)

* C R O S S T A B U L A T I O N O F *

Q177 YEAR COMMISSIONED BY Q156 WEST ORGANIZATION

* PAGE 130

Q177	Q156 COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	ROW TOTAL
		1	2	3	
8		0	2	1	3
H		0.	66.7	33.3	2.2
		0.	3.2	8.3	
		0.	1.5	0.7	
9		0	1	0	1
I		0.	100.0	0.	0.7
		0.	1.6	0.	
		0.	0.7	0.	
COLUMN TOTAL		63	62	12	137
		46.0	45.3	8.8	100.0

RAW CHI SQUARE = 30.62730 WITH 16 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0150

CRAMER'S V = 0.33433

CONTINGENCY COEFFICIENT = 0.42745

LAMBDA (ASYMMETRIC) = 0.03636 WITH Q177 DEPENDENT. = 0.22973 WITH Q156 DEPENDENT.

LAMBDA (SYMMETRIC) = 0.11413

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06009 WITH Q177 DEPENDENT. = 0.12640 WITH Q156 (illegible)

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.08146

KENDALL'S TAU B = 0.28851. SIGNIFICANCE = 0.0000

KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000

GAMMA = 0.40663

SOMERS'S D (ASYMMETRIC) = 0.34961 WITH Q177 DEPENDENT. = 0.23311 WITH Q156 DEPENDENT.

SOMERS'S D (SYMMETRIC) = 0.28327

ETA = 0.35247 WITH Q177 DEPENDENT. = 0.40929 WITH Q156 DEPENDENT.

PEARSON'S R = 0.35241 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 3

* * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * *

Q178 RATING BY Q156 WEST ORGANIZATION

Q178	Q156	A	B	C	ROW TOTAL
	COUNT	1	2	3	
	ROW PCT				
	COL PCT				
	TOT PCT				
1		40	21	2	63
A		63.5	33.3	3.2	45.0
		60.6	33.9	16.7	
		28.6	15.0	1.4	
2		14	10	3	27
B		51.9	37.0	11.1	19.3
		21.2	16.1	25.0	
		10.0	7.1	2.1	
3		12	31	7	50
C		24.0	62.0	14.0	35.7
		18.2	50.0	58.3	
		8.6	22.1	5.0	
COLUMN TOTAL		66	62	12	140
		47.1	44.3	8.6	100.0

RAW CHI SQUARE = 19.01219 WITH 4 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0008

CRAMER'S V = 0.26058

CONTINGENCY COEFFICIENT = 0.34578

LAMBDA (ASYMMETRIC) = 0.19481 WITH Q178 DEPENDENT. = 0.25676 WITH [illegible] DEPENDENT.

LAMBDA (SYMMETRIC) = 0.22517

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06869 WITH Q178 DEPENDENT. = [illegible]

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07283

KENDALL'S TAU B = 0.32552. SIGNIFICANCE = 0.0000

KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000

GAMMA = 0.50860

SOMERS'S D (ASYMMETRIC) = 0.34168 WITH Q178 DEPENDENT. = 0.31 11 WITH [illegible] DEPENDENT.

SOMERS'S D (SYMMETRIC) = 0.32513

ETA = 0.35850 WITH Q178 DEPENDENT. = 0.35175 WITH [illegible] DEPENDENT.

PEARSON'S R = 0.35006 SIGNIFICANCE = 0.0000

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Q178 RATING BY Q146 SOCIAL FOR PETITION

Q146

COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	D	ROW TOTAL
Q178					
1 A	28	30	5	0	63
	44.4	47.6	7.9	0.	45.0
	65.1	40.0	23.8	0.	
	20.0	21.4	3.6	0.	
2 B	7	14	6	0	27
	25.9	51.9	22.2	0.	19.3
	16.3	18.7	28.6	0.	
	5.0	10.0	4.3	0.	
3 C	8	31	10	1	50
	16.0	62.0	20.0	2.0	35.7
	18.6	41.3	47.6	100.0	
	5.7	22.1	7.1	0.7	
COLUMN TOTAL	43	75	21	1	140
	30.7	53.6	15.0	0.7	100.0

RAW CHI SQUARE = 14.35528 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0259
CRAMER'S . = 0.22643
CONTINGENCY COEFFICIENT = 0.30496
LAMBDA (ASYMMETRIC) = 0.09091 WITH Q178 DEPENDENT. = 0. WITH Q146 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04930
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05173 WITH Q178 DEPENDENT. = 0.05314 WITH Q146 D
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05242
KENDALL'S TAU B = 0.26733. SIGNIFICANCE = 0.0003
KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000
GAMMA = 0.42331
SOMERS'S D (ASYMMETRIC) = 0.27542 WITH Q178 DEPENDENT. = 0. WITH Q146 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.26721
ETA = 0.30352 WITH Q178 DEPENDENT. = 0.30087 WITH Q146 DEPENDENT.
PEARSON'S R = 0.29463 SIGNIFICANCE = 0.0002

FILE LEE (CREATION DATE = 02-13-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q179 SOURCE OF COMISSION BY Q131 SOCIAL ASPECTS
* PAGE

Q179	COUNT / ROW PCT / COL PCT / TOT PCT	Q131 B	C	D	ROW TOTAL
		2	3	4	
A	1	5	47	25	77
		6.5	61.0	32.5	55.4
		50.0	57.3	53.2	
		3.6	33.8	18.0	
B	2	0	18	4	22
		0.	81.8	18.2	15.8
		0.	22.0	8.5	
		0.	12.9	2.9	
C	3	3	7	5	15
		20.0	46.7	33.3	10.8
		30.0	8.5	10.6	
		2.2	5.0	3.6	
D	4	2	10	13	25
		8.0	40.0	52.0	18.0
		20.0	12.2	27.7	
		1.4	7.2	9.4	
	COLUMN TOTAL	10	82	47	139
		7.2	59.0	33.8	100.0

RAW CHI SQUARE = 13.06712 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0420
CRAMER'S V = 0.21680
CONTINGENCY COEFFICIENT = 0.29314
LAMBDA (ASYMMETRIC) = 0. WITH Q179 DEPENDENT. = 0.05263 WITH Q131 DEPENDENT.
LAMEDA (SYMMETRIC) = 0.02521
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04163 WITH Q179 DEPENDENT. = 0.05606 WITH Q131
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04778
KENDALL'S TAU B = 0.05674. SIGNIFICANCE = 0.2319
KENDALL'S TAU C = 42.32546. SIGNIFICANCE = 0.0000
GAMMA = 0.09605
SOMERS'S D (ASYMMETRIC) = 0.06143 WITH Q179 DEPENDENT. = 0.05241 WITH Q131 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.05656
ETA = 0.16194 WITH Q179 DEPENDENT. = 0.15818 WITH Q131 DEPENDENT.
PEARSON'S R = 0.07582 SIGNIFICANCE = 0.1875

NUMBER OF MISSING OBSERVATIONS = 1

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * * *
Q146 SOCIAL FOR RETENTION Model BY Q156 BEST ORGANIZATION
* PAGE

Q146	Q156	A	B	C	ROW TOTAL
		1.	2.	3.	
A	1.	36	7	0	43
		83.7	16.3	0.	30.7
		54.5	11.3	0.	
		25.7	5.0	0.	
B	2.	27	44	4	75
		36.0	58.7	5.3	53.6
		40.9	71.0	33.3	
		19.3	31.4	2.9	
C	3.	3	10	8	21
		14.3	47.6	38.1	15.0
		4.5	16.1	66.7	
		2.1	7.1	5.7	
D	4.	0	1	0	1
		0.	100.0	0.	0.7
		0.	1.6	0.	
		0.	0.7	0.	
COLUMN TOTAL		66	62	12	140
		47.1	44.3	8.6	100.0

CHI SQUARE = 57.37613 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.45268
CONTINGENCY COEFFICIENT = 0.53916
LAMBDA (ASYMMETRIC) = 0.20000 WITH Q146 DEPENDENT. = 0.33784 WITH Q156 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.27338
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.18795 WITH Q146 DEPENDENT. = 0.20643 WITH Q156
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.19676
KENDALL'S TAU B = 0.51587 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.45276 SIGNIFICANCE = 0.0000
GAMMA = 0.78462
SOMERS'S D (ASYMMETRIC) = 0.52559 WITH Q146 DEPENDENT. = 0.50633 WITH Q156 DEPENDENT
SOMERS'S D (SYMMETRIC) = 0.51578
ETA = 0.54543 WITH Q146 DEPENDENT. = 0.55413 WITH Q156 DEPENDENT.
PEARSON'S R = 0.54542 SIGNIFICANCE = 0.0000

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Q131 SOCIAL ASPECTS ... BY Q160 CIVILIAN FRIENDS ...
* PAGE 1 OF 1

Q131	COUNT / ROW PCT / COL PCT / TOT PCT	Q160: A 1.	B 2.	C 3.	D 4.	ROW TOTAL
B	2.	2	2	5	0	9
		22.2	22.2	55.6	0.	6.7
		10.0	4.2	8.9	0.	
		1.5	1.5	3.7	0.	
C	3.	9	30	32	9	80
		11.3	37.5	40.0	11.3	59.3
		45.0	62.5	57.1	81.8	
		6.7	22.2	23.7	6.7	
D	4.	9	16	19	2	46
		19.6	34.8	41.3	4.3	34.1
		45.0	33.3	33.9	18.2	
		6.7	11.9	14.1	1.5	
	COLUMN TOTAL	20	48	56	11	135
		14.8	35.6	41.5	8.1	100.0

CHI SQUARE = 5.22881 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.5148
CRAMER'S V = 0.13916
CONTINGENCY COEFFICIENT = 0.19310
LAMBDA (ASYMMETRIC) = 0. WITH Q131 DEPENDENT. = 0. WITH Q160 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.02596 WITH Q131 DEPENDENT. = 0.01825 WITH Q160
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02143
KENDALL'S TAU B = -0.07362 SIGNIFICANCE = 0.1744
KENDALL'S TAU C = -0.06584 SIGNIFICANCE = 0.1744
GAMMA = -0.12330
SOMERS'S D (ASYMMETRIC) = -0.06523 WITH Q131 DEPENDENT. = -0.08309 WITH Q160 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.07309
ETA = 0.07558 WITH Q131 DEPENDENT. = 0.11937 WITH Q160 DEPENDENT.
PEARSON'S R =-0.07497 SIGNIFICANCE = 0.1937

NUMBER OF MISSING OBSERVATIONS = 5

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q173 GRADE BY Q146 SOCIAL FOR RETENTION
* PAGE

Q173	Q146: COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	23	36	5	0	64
		35.9	56.3	7.8	0.	45.7
		53.5	48.0	23.8	0.	
		16.4	25.7	3.6	0.	
C	3.	20	39	16	1	76
		26.3	51.3	21.1	1.3	54.3
		46.5	52.0	76.2	100.0	
		14.3	27.9	11.4	0.7	
	COLUMN TOTAL	43	75	21	1	140
		30.7	53.6	15.0	0.7	100.0

CHI SQUARE = 6.10751 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.1065
CRAMER'S V = 0.20887
CONTINGENCY COEFFICIENT = 0.20445
LAMBDA (ASYMMETRIC) = 0.04688 WITH Q173 DEPENDENT. = 0. WITH Q146 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.02[illegible]26
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03494 WITH Q173 DEPENDENT. = 0.02369 WITH Q146
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02824
KENDALL'S TAU B = 0.16696 SIGNIFICANCE = 0.0195
KENDALL'S TAU C = 0.18163 SIGNIFICANCE = 0.0195
GAMMA = 0.30479
SOMERS'S D (ASYMMETRIC) = 0.15235 WITH Q173 DEPENDENT. = 0.18298 WITH Q146 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.16626
ETA = 0.20887 WITH Q173 DEPENDENT. = 0.18618 WITH Q146 DEPENDENT.
PEARSON'S R = 0.18618 SIGNIFICANCE = 0.0138

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q156 BEST ORGANIZATION
* PAGE

		Q156			
	COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	ROW TOTAL
		1.	2.	3.	
Q173					
A	1.	36	25	3	64
		56.3	39.1	4.7	45.7
		54.5	40.3	25.0	
		25.7	17.9	2.1	
C	3.	30	37	9	76
		39.5	48.7	11.8	54.3
		45.5	59.7	75.0	
		21.4	26.4	6.4	
	COLUMN TOTAL	66	62	12	140
		47.1	44.3	8.6	100.0

CHI SQUARE = 4.87528 WITH 2 DEGREES OF FREEDOM SIGNIFICANCE = 0.0874
CRAMER'S V = 0.18661
CONTINGENCY COEFFICIENT = 0.18344
LAMBDA (ASYMMETRIC) = 0.09375 WITH Q173 DEPENDENT. = 0.09459 WITH Q156 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.09420
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.02586 WITH Q173 DEPENDENT. = 0.01926 WITH Q156
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02208
KENDALL'S TAU B = 0.17775 SIGNIFICANCE = 0.0152
KENDALL'S TAU C = 0.18960 SIGNIFICANCE = 0.0152
GAMMA = 0.32839
SOMERS'S D (ASYMMETRIC) = 0.16525 WITH Q173 DEPENDENT. = 0.19120 WITH Q156 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.17728
ETA = 0.18661 WITH Q173 DEPENDENT. = 0.18655 WITH Q156 DEPENDENT.
PEARSON'S R = 0.18655 SIGNIFICANCE = 0.0137

FILE SEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * * *
Q175 AGE BY Q156 BEST ORGANIZATION
* PAGE

Q175	COUNT / ROW PCT / COL PCT / TOT PCT	Q156 1.	Q156 2.	Q156 3.	ROW TOTAL
1. A		10	19	6	35
		28.6	54.3	17.1	25.0
		15.2	30.6	50.0	
		7.1	13.6	4.3	
2. B		34	26	6	66
		51.5	39.4	9.1	47.1
		51.5	41.9	50.0	
		24.3	18.6	4.3	
3. C		13	12	0	25
		52.0	48.0	0.	17.9
		19.7	19.4	0.	
		9.3	8.6	0.	
4. D		8	3	0	11
		72.7	27.3	0.	7.9
		12.1	4.8	0.	
		5.7	2.1	0.	
5. E		1	2	0	3
		33.3	66.7	0.	2.1
		1.5	3.2	0.	
		0.7	1.4	0.	
COLUMN TOTAL		66	62	12	140
		47.1	44.3	8.6	100.0

CHI SQUARE = 13.24875 WITH 8 DEGREES OF FREEDOM SIGNIFICANCE = 0.1036
CRAMER'S V = 0.21752
CONTINGENCY COEFFICIENT = 0.29403
LAMBDA (ASYMMETRIC) = 0. WITH Q175 DEPENDENT. = 0.13514 WITH Q156 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06757
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04466 WITH Q175 DEPENDENT. = 0.06227 WITH Q156
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05202
KENDALL'S TAU B = -0.21475 SIGNIFICANCE = 0.0024
KENDALL'S TAU C = -0.20082 SIGNIFICANCE = 0.0024
GAMMA = -0.34184
SOMERS'S D (ASYMMETRIC) = [illegible]

APPENDIX F

LEADERSHIP CROSSTABS

* * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * *
Q175 AGE BY Q126 FRUSTRATED
* PAGE

Q175	COUNT / ROW PCT / COL PCT / TOT PCT	Q126 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
1.		4	21	10	0	35
A		11.4	60.0	28.6	0.	25.0
		33.3	36.8	14.7	0.	
		2.9	15.0	7.1	0.	
2.		3	27	33	3	66
B		4.5	40.9	50.0	4.5	47.1
		25.0	47.4	48.5	100.0	
		2.1	19.3	23.6	2.1	
3.		4	6	15	0	25
C		16.0	24.0	60.0	0.	17.9
		33.3	10.5	22.1	0.	
		2.9	4.3	10.7	0.	
4.		0	3	8	0	11
D		0.	27.3	72.7	0.	7.9
		0.	5.3	11.8	0.	
		0.	2.1	5.7	0.	
5.		1	0	2	0	3
E		33.3	0.	66.7	0.	2.1
		8.3	0.	2.9	0.	
		0.7	0.	1.4	0.	
COLUMN TOTAL		12 8.6	57 40.7	68 48.6	3 2.1	140 100.0

CHI SQUARE = 21.37246 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0452
CRAMER'S V = 0.22558
CONTINGENCY COEFFICIENT = 0.36393
LAMBDA (ASYMMETRIC) = 0.01351 WITH Q175 DEPENDENT. = 0.15276 WITH Q126 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08219
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06606 WITH Q175 DEPENDENT. = 0.08440 WITH Q126
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07415
KENDALL'S TAU B = 0.19289 SIGNIFICANCE = 0.0054
KENDALL'S TAU C = 0.16259 SIGNIFICANCE = 0.0054
GAMMA = 0.29927
SOMERS'S D (ASYMMETRIC) = 0.20650 WITH Q175 DEPENDENT. = 0.18019 WITH Q126 DEPENDENT

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* * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F   * * * * * * * * * * * * * * * * *
   Q178       RATING                                                BY  Q125       CENTRALIZED MANAGEMENT
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *   PAGE

                    Q125
          COUNT    I
          ROW PCT  IA        B         C         D
          COL PCT  I                                         ROW
          TOT PCT  I      1  I      2  I      3  I      4  I   TOTAL
Q178      ---------I---------I---------I---------I---------I
                 1 I     16  I     30  I     15  I      0  I     61
  A                I   26.2  I   49.2  I   24.6  I    0.   I   44.5
                   I   69.6  I   40.5  I   41.7  I    0.   I
                   I   11.7  I   21.9  I   10.9  I    0.   I
                  -I---------I---------I---------I---------I
                 2 I      2  I     19  I      6  I      0  I     27
  B                I    7.4  I   70.4  I   22.2  I    0.   I   19.7
                   I    8.7  I   25.7  I   16.7  I    0.   I
                   I    1.5  I   13.9  I    4.4  I    0.   I
                  -I---------I---------I---------I---------I
                 3 I      5  I     25  I     15  I      4  I     49
  C                I   10.2  I   51.0  I   30.6  I    8.2  I   35.8
                   I   21.7  I   33.8  I   41.7  I  100.0  I
                   I    3.6  I   18.2  I   10.9  I    2.9  I
                  -I---------I---------I---------I---------I
          COLUMN         23        74        36         4       137
          TOTAL        16.8      54.0      26.3       2.9     100.0

RAW CHI SQUARE =    15.37092 WITH    6 DEGREES OF FREEDOM.  SIGNIFICANCE =  0.0176
CRAMER'S V =  0.23685
CONTINGENCY COEFFICIENT =  0.31761
LAMBDA (ASYMMETRIC) =  0.05263 WITH Q178    DEPENDENT.        =  0.      WITH Q125    DEPENDENT.
LAMBDA (SYMMETRIC) =  0.02878
UNCERTAINTY COEFFICIENT (ASYMMETRIC) =  0.05713 WITH Q178    DEPENDENT.        =  0.05510 WITH Q125
UNCERTAINTY COEFFICIENT (SYMMETRIC) =  0.05609
KENDALL'S TAU B =  0.19465.    SIGNIFICANCE =  0.0058
KENDALL'S TAU C = ********.    SIGNIFICANCE =  0.0000
GAMMA =  0.31262
SOMERS'S D (ASYMMETRIC) =  0.19857 WITH Q178    DEPENDENT.        =  0.19080 WITH Q125    DEPENDENT.
SOMERS'S D (SYMMETRIC) =  0.19461
ETA =  0.28010 WITH Q178    DEPENDENT.        =  0.23613 WITH Q125    DEPENDENT.
PEARSON'S R = 0.23565   SIGNIFICANCE =  0.0028

NUMBER OF MISSING OBSERVATIONS =     3
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FILE LEE (CREATION DATE = 02-09-81)

* C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * *
Q119 RETENTION PROBLEM BY Q128 SENIOR LEADERSHIP IMPROVES LIFE
* PAGE

Senior leadership improves

Q119	Q128 A (1.)	B (2.)	C (3.)	D (4.)	ROW TOTAL
A (1.)	6	19	1	0	26
	23.1	73.1	3.8	0.	18.6
	85.7	19.0	3.7	0.	
	4.3	13.6	0.7	0.	
B (2.)	1	61	16	1	79
	1.3	77.2	20.3	1.3	56.4
	14.3	61.0	59.3	16.7	
	0.7	43.6	11.4	0.7	
C (3.)	0	20	8	2	30
	0.	66.7	26.7	6.7	21.4
	0.	20.0	29.6	33.3	
	0.	14.3	5.7	1.4	
D (4.)	0	0	2	3	5
	0.	0.	40.0	60.0	3.6
	0.	0.	7.4	50.0	
	0.	0.	1.4	2.1	
COLUMN TOTAL	7	100	27	6	140
	5.0	71.4	19.3	4.3	100.0

142

CHI SQUARE = 69.61077 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.40711
CONTINGENCY COEFFICIENT = 0.57628
LAMBDA (ASYMMETRIC) = 0.11475 WITH Q119 DEPENDENT. = 0.07500 WITH Q128 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.09901
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.14759 WITH Q119 DEPENDENT. = 0.19000 WITH Q128
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.16613
KENDALL'S TAU B = 0.39178 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.27088 SIGNIFICANCE = 0.0000
GAMMA = 0.68632
SOMERS'S D (ASYMMETRIC) = 0.45322 WITH Q119 DEPENDENT. = 0.33866 WITH Q128 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.38766
ETA = 0.50335 WITH Q119 DEPENDENT. = 0.54229 WITH Q128 DEPENDENT.
PEARSON'S R = 0.48462 SIGNIFICANCE = 0.0000

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *

Q121 FRUSTATED BY CONGRESS BY Q128 SENIOR LEADERSHIP IMPROVES LIFE

* PAGE

Q121	COUNT / ROW PCT / COL PCT / TOT PCT	Q128 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	2	12	2	0	16
		12.5	75.0	12.5	0.	11.4
		28.6	12.0	7.4	0.	
		1.4	8.6	1.4	0.	
B	2.	3	65	13	1	82
		3.7	79.3	15.9	1.2	58.6
		42.9	65.0	48.1	16.7	
		2.1	46.4	9.3	0.7	
C	3.	2	23	10	4	39
		5.1	59.0	25.6	10.3	27.9
		28.6	23.0	37.0	66.7	
		1.4	16.4	7.1	2.9	
D	4.	0	0	2	1	3
		0.	0.	66.7	33.3	2.1
		0.	0.	7.4	16.7	
		0.	0.	1.4	0.7	
COLUMN TOTAL		7	100	27	6	140
		5.0	71.4	19.3	4.3	100.0

CHI SQUARE = 22.79704 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0067
CRAMER'S V = 0.23298
CONTINGENCY COEFFICIENT = 0.37421
LAMBDA (ASYMMETRIC) = 0.05172 WITH Q121 DEPENDENT. = 0.05000 WITH Q128 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05102
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.07212 WITH Q121 DEPENDENT. = 0.08557 WITH Q128
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07827
KENDALL'S TAU B = 0.25347 SIGNIFICANCE = 0.0006
KENDALL'S TAU C = 0.17020 SIGNIFICANCE = 0.0006
GAMMA = 0.45607
SOMERS'S D (ASYMMETRIC) = 0.28477 WITH Q121 DEPENDENT. = 0.22561 WITH Q128 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.25176
ETA = 0.32736 WITH Q121 DEPENDENT. = 0.35365 WITH Q128 DEPENDENT.
PEARSON'S R = 0.31243 SIGNIFICANCE = 0.0001

FILE LEE (CREATION DATE = 02-09-81)

* * * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * * * *

Q125 CENTRALIZED MANAGEMENT BY Q159 CENTRALIZATION BY CONGRESS

* PAGE

Q125	Q159	A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
A	1.	0	5	8	10	23
		0.	21.7	34.8	43.5	16.8
		0.	8.5	14.5	62.5	
		0.	3.6	5.8	7.3	
B	2.	3	32	33	6	74
		4.1	43.2	44.6	8.1	54.0
		42.9	54.2	60.0	37.5	
		2.2	23.4	24.1	4.4	
C	3.	2	21	13	0	36
		5.6	58.3	36.1	0.	26.3
		28.6	35.6	23.6	0.	
		1.5	15.3	9.5	0.	
D	4.	2	1	1	0	4
		50.0	25.0	25.0	0.	2.9
		28.6	1.7	1.8	0.	
		1.5	0.7	0.7	0.	
COLUMN TOTAL		7	59	55	16	137
		5.1	43.1	40.1	11.7	100.0

CHI SQUARE = 48.10559 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.34212
CONTINGENCY COEFFICIENT = 0.50979
LAMBDA (ASYMMETRIC) = 0.06349 WITH Q125 DEPENDENT. = 0.08974 WITH Q159 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.07801
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.12093 WITH Q125 DEPENDENT. = 0.11609 WITH Q159
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.11846
KENDALL'S TAU B = -0.34455 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.28643 SIGNIFICANCE = 0.0000
GAMMA = -0.52997
SOMERS'S D (ASYMMETRIC) = -0.33718 WITH Q125 DEPENDENT. = -0.35208 WITH Q159 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.34447
ETA = 0.45032 WITH Q125 DEPENDENT. = 0.43235 WITH Q159 DEPENDENT.
PEARSON'S R = -0.41441 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 3

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q126 FRUSTRATED BY Q155 IMPRESSION OF GENERALS
* PAGE

Q126	Q155	A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
A	1.	0	5	4	3	12
		0.	41.7	33.3	25.0	8.6
		0.	5.1	13.8	42.9	
		0.	3.6	2.9	2.1	
B	2.	2	32	19	4	57
		3.5	56.1	33.3	7.0	40.7
		40.0	32.3	65.5	57.1	
		1.4	22.9	13.6	2.9	
C	3.	3	59	6	0	68
		4.4	86.8	8.8	0.	48.6
		60.0	59.6	20.7	0.	
		2.1	42.1	4.3	0.	
D	4.	0	3	0	0	3
		0.	100.0	0.	0.	2.1
		0.	3.0	0.	0.	
		0.	2.1	0.	0.	
COLUMN TOTAL		5	99	29	7	140
		3.6	70.7	20.7	5.0	100.0

CHI SQUARE = 30.83715 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0003
CRAMER'S V = 0.27096
CONTINGENCY COEFFICIENT = 0.42486
LAMBDA (ASYMMETRIC) = 0.23611 WITH Q126 DEPENDENT. = 0. WITH Q155 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.15044
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.11096 WITH Q126 DEPENDENT. = 0.13336 WITH Q155
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.12113
KENDALL'S TAU B = -0.38027 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.26231 SIGNIFICANCE = 0.0000
GAMMA = -0.65937
SOMERS'S D (ASYMMETRIC) = -0.43404 WITH Q126 DEPENDENT. = -0.33316 WITH Q155 DEPENDENT
SOMERS'S D (SYMMETRIC) = -0.37697
ETA = 0.43352 WITH Q126 DEPENDENT. = 0.41998 WITH Q155 DEPENDENT.
PEARSON'S R =-0.41256 SIGNIFICANCE = 0.0000

FILE LEE (CREATION DATE = 02-09-81)

* C R O S S T A B U L A T I O N O F *
Q140 RECEPTIVE TO SUGGESTIONS BY Q152 CAREER IRRITANTS
* PAGE

Q140	COUNT / ROW PCT / COL PCT / TOT PCT	Q152 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	0	1	3	2	6
		0.	16.7	50.0	33.3	4.4
		0.	3.8	4.3	5.4	
		0.	0.7	2.2	1.5	
B	2.	1	18	42	19	80
		1.3	22.5	52.5	23.8	58.8
		33.3	69.2	60.0	51.4	
		0.7	13.2	30.9	14.0	
C	3.	0	5	25	12	42
		0.	11.9	59.5	28.6	30.9
		0.	19.2	35.7	32.4	
		0.	3.7	18.4	8.8	
D	4.	2	2	0	4	8
		25.0	25.0	0.	50.0	5.9
		66.7	7.7	0.	10.8	
		1.5	1.5	0.	2.9	
	COLUMN TOTAL	3	26	70	37	136
		2.2	19.1	51.5	27.2	100.0

CHI SQUARE = 28.67514 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0007
CRAMER'S V = 0.26511
CONTINGENCY COEFFICIENT = 0.41729
LAMBDA (ASYMMETRIC) = 0.01786 WITH Q140 DEPENDENT. = 0.06061 WITH Q152 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04098
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.07866 WITH Q140 DEPENDENT. = 0.07026 WITH Q152
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.07422
KENDALL'S TAU B = 0.05337 SIGNIFICANCE = 0.2475
KENDALL'S TAU C = 0.04181 SIGNIFICANCE = 0.2475
GAMMA = 0.08841
SOMERS'S D (ASYMMETRIC) = 0.05025 WITH Q140 DEPENDENT. = 0.05668 WITH Q152 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.05327
ETA = 0.24415 WITH Q140 DEPENDENT. = 0.14905 WITH Q152 DEPENDENT.
PEARSON'S R = 0.00132 SIGNIFICANCE = 0.4939

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q135 AUTHORITY COMMENSURATE WITH RANK BY Q150 PROFESSIONALISM
* PAGE

Q135	COUNT / ROW PCT / COL PCT / TOT PCT	Q150 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	1	17	13	5	36
		2.8	47.2	36.1	13.9	25.7
		50.0	32.7	17.8	38.5	
		0.7	12.1	9.3	3.6	
B	2.	1	28	36	4	69
		1.4	40.6	52.2	5.8	49.3
		50.0	53.8	49.3	30.8	
		0.7	20.0	25.7	2.9	
C	3.	0	5	17	3	25
		0.	20.0	68.0	12.0	17.9
		0.	9.6	23.3	23.1	
		0.	3.6	12.1	2.1	
D	4.	0	2	7	1	10
		0.	20.0	70.0	10.0	7.1
		0.	3.8	9.6	7.7	
		0.	1.4	5.0	0.7	
	COLUMN TOTAL	2 / 1.4	52 / 37.1	73 / 52.1	13 / 9.3	140 / 100.0

CHI SQUARE = 10.45357 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.3150
CRAMER'S V = 0.15776
CONTINGENCY COEFFICIENT = 0.26359
LAMBDA (ASYMMETRIC) = 0.01408 WITH Q135 DEPENDENT. = 0.05970 WITH Q150 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.03623
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03409 WITH Q135 DEPENDENT. = 0.04116 WITH Q150
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03729
KENDALL'S TAU B = 0.16235 SIGNIFICANCE = 0.0166
KENDALL'S TAU C = 0.13347 SIGNIFICANCE = 0.0166
GAMMA = 0.25918
SOMERS'S D (ASYMMETRIC) = 0.17220 WITH Q135 DEPENDENT. = 0.15307 WITH Q150 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.16207
ETA = 0.23595 WITH Q135 DEPENDENT. = 0.19589 WITH Q150 DEPENDENT.
PEARSON'S R = 0.16472 SIGNIFICANCE = 0.0259

* CROSSTABULATION OF *

Q178 RATING BY Q152 CAREER IRRITANTS

Q178	COUNT / ROW PCT / COL PCT / TOT PCT	Q152 A	B	C	D	ROW TOTAL
A	1	2	17	33	10	62
		3.2	27.4	53.2	16.1	44.6
		66.7	63.0	45.8	27.0	
		1.4	12.2	23.7	7.2	
B	2	0	6	14	7	27
		0.	22.2	51.9	25.9	19.4
		0.	22.2	19.4	18.9	
		0.	4.3	10.1	5.0	
C	3	1	4	25	20	50
		2.0	8.0	50.0	40.0	36.0
		33.3	14.8	34.7	54.1	
		0.7	2.9	18.0	14.4	
	COLUMN TOTAL	3	27	72	37	139
		2.2	19.4	51.8	26.6	100.0

RAW CHI SQUARE = 12.41131 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0534
CRAMER'S V = 0.21129
CONTINGENCY COEFFICIENT = 0.28631
LAMBDA (ASYMMETRIC) = 0.12937 WITH Q178 DEPENDENT. = 0. WITH Q152 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06944
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04694 WITH Q178 DEPENDENT. = 0.04485 WITH Q15
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04588
KENDALL'S TAU B = 0.25522. SIGNIFICANCE = 0.0004
KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000
GAMMA = 0.39912
SOMERS'S D (ASYMMETRIC) = 0.25752 WITH Q178 DEPENDENT. = 0.25294 WITH Q152 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.25521
ETA = 0.28713 WITH Q178 DEPENDENT. = 0.27631 WITH Q152 DEPENDENT.
PEARSON'S R = 0.27620 SIGNIFICANCE = 0.0005

NUMBER OF MISSING OBSERVATIONS = 1

APPENDIX G

RETENTION CROSSTABS

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q153 APPLALING CAREER
* PAGE

Q173	Q153 COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	1	15	33	15	64
		1.6	23.4	51.6	23.4	45.7
		50.0	36.6	42.3	78.9	
		0.7	10.7	23.6	10.7	
C	3.	1	26	45	4	76
		1.3	34.2	59.2	5.3	54.3
		50.0	63.4	57.7	21.1	
		0.7	18.6	32.1	2.9	
	COLUMN TOTAL	2	41	78	19	140
		1.4	29.3	55.7	13.6	100.0

150

CHI SQUARE = 10.21225 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0168
CRAMER'S V = 0.27008
CONTINGENCY COEFFICIENT = 0.26074
LAMBDA (ASYMMETRIC) = 0.17188 WITH Q173 DEPENDENT. = 0. WITH Q153 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08730
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05488 WITH Q173 DEPENDENT. = 0.03719 WITH Q153
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04434
KENDALL'S TAU B = -0.19767 SIGNIFICANCE = 0.0073
KENDALL'S TAU C = -0.21306 SIGNIFICANCE = 0.0073
GAMMA = -0.35656
SOMERS'S D (ASYMMETRIC) = -0.18204 WITH Q173 DEPENDENT. = -0.21464 WITH Q153 DEPENDENT
SOMERS'S D (SYMMETRIC) = -0.19700
ETA = 0.27008 WITH Q173 DEPENDENT. = 0.21102 WITH Q153 DEPENDENT.
PEARSON'S R =-0.21102 SIGNIFICANCE = 0.0062

CROSSTABULATION OF Q175 AGE BY Q162 OWN MOTIVATION

Q175		COUNT / ROW PCT / COL PCT / TOT PCT	Q162 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	COUNT	3	17	15	0	35
		ROW PCT	8.6	48.6	42.9	0.	25.0
		COL PCT	18.8	23.3	31.3	0.	
		TOT PCT	2.1	12.1	10.7	0.	
B	2.	COUNT	6	38	21	1	66
		ROW PCT	9.1	57.6	31.8	1.5	47.1
		COL PCT	37.5	52.1	43.8	33.3	
		TOT PCT	4.3	27.1	15.0	0.7	
C	3.	COUNT	4	11	9	1	25
		ROW PCT	16.0	44.0	36.0	4.0	17.9
		COL PCT	25.0	15.1	18.8	33.3	
		TOT PCT	2.9	7.9	6.4	0.7	
D	4.	COUNT	3	5	3	0	11
		ROW PCT	27.3	45.5	27.3	0.	7.9
		COL PCT	18.8	6.8	6.3	0.	
		TOT PCT	2.1	3.6	2.1	0.	
E	5.	COUNT	0	2	0	1	3
		ROW PCT	0.	66.7	0.	33.3	2.1
		COL PCT	0.	2.7	0.	33.3	
		TOT PCT	0.	1.4	0.	0.7	
		COLUMN TOTAL	16	73	48	3	140
			11.4	52.1	34.3	2.1	100.0

CHI SQUARE = 21.97897 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0378
CRAMER'S V = 0.22876
CONTINGENCY COEFFICIENT = 0.36836
LAMBDA (ASYMMETRIC) = 0. WITH Q175 DEPENDENT. = 0. WITH Q162 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03746 WITH Q175 DEPENDENT. = 0.04664 WITH Q162
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04155
KENDALL'S TAU B = -0.06630 SIGNIFICANCE = 0.1888
KENDALL'S TAU C = -0.05619 SIGNIFICANCE = 0.1888
GAMMA = -0.10225

* * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * *
Q176 YEARS TO RETIREMENT BY Q153 APPEALING CAREER
* PA..

Q176	Q153: COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	2	5	15	6	28
		7.1	17.9	53.6	21.4	20.0
		100.0	12.2	19.2	31.6	
		1.4	3.6	10.7	4.3	
B	2.	0	8	23	5	36
		0.	22.2	63.9	13.9	25.7
		0.	19.5	29.5	26.3	
		0.	5.7	16.4	3.6	
C	3.	0	27	33	7	67
		0.	40.3	49.3	10.4	47.9
		0.	65.9	42.3	36.8	
		0.	19.3	23.6	5.0	
D	4.	0	1	7	1	9
		0.	11.1	77.8	11.1	6.4
		0.	2.4	9.0	5.3	
		0.	0.7	5.0	0.7	
	COLUMN TOTAL	2	41	78	19	140
		1.4	29.3	55.7	13.6	100.0

CHI SQUARE = 17.19327 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0458
CRAMER'S V = 0.20233
CONTINGENCY COEFFICIENT = 0.33072
LAMBDA (ASYMMETRIC) = 0.02740 WITH Q176 DEPENDENT. = 0. WITH Q153 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.01481
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04666 WITH Q176 DEPENDENT. = 0.05505 WITH Q153
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05051
KENDALL'S TAU B = -0.09698 SIGNIFICANCE = 0.0999
KENDALL'S TAU C = -0.08041 SIGNIFICANCE = 0.0999
GAMMA = -0.15459
SOMERS'S D (ASYMMETRIC) = -0.10305 WITH Q176 DEPENDENT. = -0.09127 WITH Q153 DEPENDENT
SOMERS'S D (SYMMETRIC) = -0.09681
ETA = 0.24449 WITH Q176 DEPENDENT. = 0.16467 WITH Q153 DEPENDENT.
PEARSON'S R =-0.07773 SIGNIFICANCE = 0.1807

FILE LEE (CREATION DATE = 02/12/81)

* C R O S S T A B U L A T I O N O F *

Q179 SOURCE OF COMISSION BY Q169 PAY VS RETENTION PAGE 1

Q179	COUNT / ROW PCT / COL PCT / TOT PCT	Q169 A	B	C	D	E	ROW TOTAL
1		1	62	7	7	0	77
A		1.3	80.5	9.1	9.1	0.	55.0
		14.3	62.6	50.0	43.8	0.	
		0.7	44.3	5.0	5.0	0.	
2		0	13	5	4	0	22
B		0.	59.1	22.7	18.2	0.	15.7
		0.	13.1	35.7	25.0	0.	
		0.	9.3	3.6	2.9	0.	
3		3	8	0	2	2	15
C		20.0	53.3	0.	13.3	13.3	10.7
		42.9	8.1	0.	12.5	50.0	
		2.1	5.7	0.	1.4	1.4	
4		3	16	2	3	2	26
D		11.5	61.5	7.7	11.5	7.7	18.6
		42.9	16.2	14.3	18.8	50.0	
		2.1	11.4	1.4	2.1	1.4	
COLUMN TOTAL		7 5.0	99 70.7	14 10.0	16 11.4	4 2.9	140 100.0

RAW CHI SQUARE = 31.87808 WITH 12 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0014
CRAMER'S V = 0.27550
CONTINGENCY COEFFICIENT = 0.43066
LAMBDA (ASYMMETRIC) = 0.06349 WITH Q179 DEPENDENT. = 0. WITH Q169 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.03846
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.09220 WITH Q179 DEPENDENT. = 0.11084 WITH Q169
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.10066
KENDALL'S TAU B = 0.04795. SIGNIFICANCE = 0.2627
KENDALL'S TAU C = 28.08541. SIGNIFICANCE = 0.0000
GAMMA = 0.07896
SOMERS'S D (ASYMMETRIC) = 0.05516 WITH Q179 DEPENDENT. = 0.04167 WITH Q169 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.04746
ETA = 0.34336 WITH Q179 DEPENDENT. = 0.14718 WITH Q169 DEPENDENT.
PEARSON'S R = 0.08940 SIGNIFICANCE = 0.1468

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * * *
Q122 RETENTION MORE TALK BY Q161 RETENTION OF QUALITY
* PAGE

Q122	Q161 A (1.)	B (2.)	C (3.)	D (4.)	ROW TOTAL
A (1.)	1	1	0	0	2
	50.0	50.0	0.	0.	1.4
	1.2	1.9	0.	0.	
	0.7	0.7	0.	0.	
B (2.)	3	2	1	0	6
	50.0	33.3	16.7	0.	4.3
	3.6	3.8	33.3	0.	
	2.1	1.4	0.7	0.	
C (3.)	19	34	2	1	56
	33.9	60.7	3.6	1.8	40.0
	22.9	64.2	66.7	100.0	
	13.6	24.3	1.4	0.7	
D (4.)	60	16	0	0	76
	78.9	21.1	0.	0.	54.3
	72.3	30.2	0.	0.	
	42.9	11.4	0.	0.	
COLUMN TOTAL	83	53	3	1	140
	59.3	37.9	2.1	0.7	100.0

CHI SQUARE = 34.26442 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0001
CRAMER'S V = 0.28563
CONTINGENCY COEFFICIENT = 0.44342
LAMBDA (ASYMMETRIC) = 0.32813 WITH Q122 DEPENDENT. = 0.26316 WITH Q161 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.29752
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.13252 WITH Q122 DEPENDENT. = 0.14894 WITH Q161
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.14025
KENDALL'S TAU B = -0.41060 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.28667 SIGNIFICANCE = 0.0000
GAMMA = -0.66530
SOMERS'S D (ASYMMETRIC) = -0.42600 WITH Q122 DEPENDENT. = -0.39576 WITH Q161 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.41032
ETA = 0.37728 WITH Q122 DEPENDENT. = 0.44207 WITH Q161 DEPENDENT.
PEARSON'S R = -0.36730 SIGNIFICANCE = 0.0000

Q123	COUNT / ROW PCT / COL PCT / TOT PCT	Q137: A 1.	B 2.	C 3.	D 4.	ROW TOTAL
B	2.	1	9	8	3	21
		4.8	42.9	38.1	14.3	15.1
		50.0	47.4	8.6	12.0	
		0.7	6.5	5.8	2.2	
C	3.	0	9	69	10	88
		0.	10.2	78.4	11.4	63.3
		0.	47.4	74.2	40.0	
		0.	6.5	49.6	7.2	
D	4.	1	1	16	12	30
		3.3	3.3	53.3	40.0	21.6
		50.0	5.3	17.2	48.0	
		0.7	0.7	11.5	8.6	
	COLUMN TOTAL	2	19	93	25	139
		1.4	13.7	66.9	18.0	100.0

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CHI SQUARE = 35.38269 WITH 6 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.35676
CONTINGENCY COEFFICIENT = 0.45045
LAMBDA (ASYMMETRIC) = 0.05882 WITH Q123 DEPENDENT. = 0.02174 WITH Q137 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04124
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.12248 WITH Q123 DEPENDENT. = 0.12186 WITH Q137
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.12217
KENDALL'S TAU B = 0.32626 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.25216 SIGNIFICANCE = 0.0000
GAMMA = 0.53281
SOMERS'S D (ASYMMETRIC) = 0.33547 WITH Q123 DEPENDENT. = 0.31731 WITH Q137 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.32614
ETA = 0.36492 WITH Q123 DEPENDENT. = 0.33205 WITH Q137 DEPENDENT.
PEARSON'S R = 0.32958 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 1

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q163 RETENTION BY Q171 EXTERNAL VS INTERNAL FACTORS
* PAGE

Q163	Q171 COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	ROW TOTAL
A	1.	1 33.3 2.9 0.7	2 66.7 1.9 1.4	3 2.1
B	2.	12 66.7 34.3 8.6	6 33.3 5.7 4.3	18 12.9
C	3.	18 21.7 51.4 12.9	65 78.3 61.9 46.4	83 59.3
D	4.	4 11.1 11.4 2.9	32 88.9 30.5 22.9	36 25.7
	COLUMN TOTAL	35 25.0	105 75.0	140 100.0

CHI SQUARE = 20.96743 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0001
CRAMER'S V = 0.38700
CONTINGENCY COEFFICIENT = 0.36091
LAMBDA (ASYMMETRIC) = 0. WITH Q163 DEPENDENT. = 0.17143 WITH Q171 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06522
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06679 WITH Q163 DEPENDENT. = 0.11940 WITH Q171
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.08567
KENDALL'S TAU B = 0.30648 SIGNIFICANCE = 0.0001
KENDALL'S TAU C = 0.28224 SIGNIFICANCE = 0.0001
GAMMA = 0.60052
SOMERS'S D (ASYMMETRIC) = 0.37633 WITH Q163 DEPENDENT. = 0.24959 WITH Q171 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.30013
ETA = 0.31479 WITH Q163 DEPENDENT. = 0.38700 WITH Q171 DEPENDENT.
PEARSON'S R = 0.31479 SIGNIFICANCE = 0.0001

CROSSTABULATION OF Q151 RETENTION PROB WITH SR OFFICERS BY Q170 RETENTION VS PROMOTION

Q151	COUNT / ROW PCT / COL PCT / TOT PCT	Q170 A 1.	B 2.	ROW TOTAL
A	1.	0 0. 0. 0.	4 100.0 3.7 2.9	4 2.9
B	2.	2 10.5 6.3 1.4	17 89.5 15.9 12.2	19 13.7
C	3.	13 17.6 40.6 9.4	61 82.4 57.0 43.9	74 53.2
D	4.	17 40.5 53.1 12.2	25 59.5 23.4 18.0	42 30.2
	COLUMN TOTAL	32 23.0	107 77.0	139 100.0

CHI SQUARE = 11.33278 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0101
CRAMER'S V = 0.28554
CONTINGENCY COEFFICIENT = 0.27456
LAMBDA (ASYMMETRIC) = 0.06154 WITH Q151 DEPENDENT. = 0. WITH Q170 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04124
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03937 WITH Q151 DEPENDENT. = 0.07818 WITH Q170
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05237
KENDALL'S TAU B = -0.26316 SIGNIFICANCE = 0.0006
KENDALL'S TAU C = -0.24388 SIGNIFICANCE = 0.0006
GAMMA = -0.54236
SOMERS'S D (ASYMMETRIC) = -0.34404 WITH Q151 DEPENDENT. = -0.20130 WITH Q170 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.25399
ETA = 0.26796 WITH Q151 DEPENDENT. = 0.28554 WITH Q170 DEPENDENT.
PEARSON'S R =-0.26796 SIGNIFICANCE = 0.0007

NUMBER OF MISSING OBSERVATIONS = 1

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q170 RETENTION VS PROMOTION
* PAGE

		Q170		
	COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	ROW TOTAL
Q173				
A	1.	19	45	64
		29.7	70.3	45.7
		59.4	41.7	
		13.6	32.1	
C	3.	13	63	76
		17.1	82.9	54.3
		40.6	58.3	
		9.3	45.0	
	COLUMN TOTAL	32 22.9	108 77.1	140 100.0

CORRECTED CHI SQUARE = 2.44658 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.1178
RAW CHI SQUARE = 3.11935 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0774
PHI = 0.14927
CONTINGENCY COEFFICIENT = 0.14763
LAMBDA (ASYMMETRIC) = 0.09375 WITH Q173 DEPENDENT. = 0. WITH Q170 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06250
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.01614 WITH Q173 DEPENDENT. = 0.02070 WITH Q170
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.01814
KENDALL'S TAU B = 0.14927 SIGNIFICANCE = 0.0392
KENDALL'S TAU C = 0.12490 SIGNIFICANCE = 0.0392
GAMMA = 0.34343
SOMERS'S D (ASYMMETRIC) = 0.17708 WITH Q173 DEPENDENT. = 0.12982 WITH Q170 DEPENDENT
SOMERS'S D (SYMMETRIC) = 0.14712
ETA = 0.14927 WITH Q173 DEPENDENT. = 0.14927 WITH Q170 DEPENDENT.
PEARSON'S R = 0.14927 SIGNIFICANCE = 0.0392

APPENDIX H

CAREER INTENTIONS CROSSTABS

Q173	COUNT / ROW PCT / COL PCT / TOT PCT	Q164 1.	2.	3.	4.	5.	ROW TOTAL
A		7	11	39	4	3	64
		10.9	17.2	60.9	6.3	4.7	45.7
		63.6	40.7	53.4	20.0	33.3	
		5.0	7.9	27.9	2.9	2.1	
C		4	16	34	16	6	76
		5.3	21.1	44.7	21.1	7.9	54.3
		36.4	59.3	46.6	80.0	66.7	
		2.9	11.4	24.3	11.4	4.3	
COLUMN TOTAL		11	27	73	20	9	140
		7.9	19.3	52.1	14.3	6.4	100.0

CHI SQUARE = 9.32652 WITH 4 DEGREES OF FREEDOM SIGNIFICANCE = 0.0534
CRAMER'S V = 0.25810
CONTINGENCY COEFFICIENT = 0.24991
LAMBDA (ASYMMETRIC) = 0.12500 WITH Q173 DEPENDENT. = 0. WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.06107
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05077 WITH Q173 DEPENDENT. = 0.02670 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03499
KENDALL'S TAU B = 0.13405 SIGNIFICANCE = 0.0438
KENDALL'S TAU C = 0.15347 SIGNIFICANCE = 0.0438
GAMMA = 0.23124
SOMERS'S D (ASYMMETRIC) = 0.11623 WITH Q173 DEPENDENT. = 0.15461 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.13270
ETA = 0.25810 WITH Q173 DEPENDENT. = 0.15063 WITH Q164 DEPENDENT.
PEARSON'S R = 0.15063 SIGNIFICANCE = 0.0378

Q178	Q164	A	B	C	D	E	ROW TOTAL
A	1	7	15	33	6	2	63
		11.1	23.8	52.4	9.5	3.2	45.0
		63.6	55.6	45.2	30.0	22.2	
		5.0	10.7	23.6	4.3	1.4	
B	2	1	3	16	4	3	27
		3.7	11.1	59.3	14.8	11.1	19.3
		9.1	11.1	21.9	20.0	33.3	
		0.7	2.1	11.4	2.9	2.1	
C	3	3	9	24	10	4	50
		6.0	18.0	48.0	20.0	8.0	35.7
		27.3	33.3	32.9	50.0	44.4	
		2.1	6.4	17.1	7.1	2.9	
COLUMN TOTAL		11	27	73	20	9	140
		7.9	19.3	52.1	14.3	6.4	100.0

RAW CHI SQUARE = 8.03446 WITH 8 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4301
CRAMER'S V = 0.16939
CONTINGENCY COEFFICIENT = 0.23297
LAMBDA (ASYMMETRIC) = 0.07792 WITH Q178 DEPENDENT. = 0. WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04167
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.02833 WITH Q178 DEPENDENT. = 0.02257 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02513
KENDALL'S TAU B = 0.16024. SIGNIFICANCE = 0.0158
KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000
GAMMA = 0.24702
SOMERS'S D (ASYMMETRIC) = 0.15688 WITH Q178 DEPENDENT. = 0.16368 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.16021
ETA = 0.18761 WITH Q178 DEPENDENT. = 0.21759 WITH Q164 DEPENDENT.
PEARSON'S R = 0.17666 SIGNIFICANCE = 0.0184

Q178	COUNT / ROW PCT / COL PCT / TOT PCT	Q165 1	2	3	4	ROW TOTAL
1		0	17	36	10	63
A		0.	27.0	57.1	15.9	45.0
		0.	31.5	54.5	52.6	
		0.	12.1	25.7	7.1	
2		0	13	10	4	27
B		0.	48.1	37.0	14.8	19.3
		0.	24.1	15.2	21.1	
		0.	9.3	7.1	2.9	
3		1	24	20	5	50
C		2.0	48.0	40.0	10.0	35.7
		100.0	44.4	30.3	26.3	
		0.7	17.1	14.3	3.6	
COLUMN TOTAL		1 0.7	54 38.6	66 47.1	19 13.6	140 100.0

RAW CHI SQUARE = 8.99637 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.1738
CRAMER'S . = 0.17925
CONTINGENCY COEFFICIENT = 0.24572
LAMBDA (ASYMMETRIC) = 0.10390 WITH Q178 DEPENDENT. = 0.09459 WITH Q165 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.09934
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03217 WITH Q178 DEPENDENT. = 0.03268 WITH Q165
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03243
KENDALL'S TAU B = -0.18815. SIGNIFICANCE = 0.0072
GAMMA = -0.29612
SOMERS'S D (ASYMMETRIC) = -0.19154 WITH Q178 DEPENDENT. = -0.18431 WITH Q165 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.18812
ETA = 0.22963 WITH Q178 DEPENDENT. = 0.20479 WITH Q165 DEPENDENT.
PEARSON'S R = -0.20113 SIGNIFICANCE = 0.0086

Q179	Q164 A	B	C	D	E	ROW TOTAL
1	5	17	37	13	5	77
A	6.5	22.1	48.1	16.9	6.5	55.0
	45.5	63.0	50.7	65.0	55.6	
	3.6	12.1	26.4	9.3	3.6	
2	1	6	12	3	0	22
B	4.5	27.3	54.5	13.6	0.	15.7
	9.1	22.2	16.4	15.0	0.	
	0.7	4.3	8.6	2.1	0.	
3	1	1	10	2	1	15
C	6.7	6.7	66.7	13.3	6.7	10.7
	9.1	3.7	13.7	10.0	11.1	
	0.7	0.7	7.1	1.4	0.7	
4	4	3	14	2	3	26
D	15.4	11.5	53.8	7.7	11.5	18.6
	36.4	11.1	19.2	10.0	33.3	
	2.9	2.1	10.0	1.4	2.1	
COLUMN TOTAL	11	27	73	20	9	140
	7.9	19.3	52.1	14.3	6.4	100.0

RAW CHI SQUARE = 10.01387 WITH 12 DEGREES OF FREEDOM. SIGNIFICANCE = 0.6147
CRAMER'S V = 0.15441
CONTINGENCY COEFFICIENT = 0.25837
LAMBDA (ASYMMETRIC) = 0. WITH Q179 DEPENDENT. = 0. WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03487 WITH Q179 DEPENDENT. = 0.03128 WITH Q164 DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03291
KENDALL'S TAU B = -0.01031. SIGNIFICANCE = 0.4441
GAMMA = -0.01618
SOMERS'S D (ASYMMETRIC) = -0.01005 WITH Q179 DEPENDENT. = -0.01052 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.01031
ETA = 0.19403 WITH Q179 DEPENDENT. = 0.08413 WITH Q164 DEPENDENT.
PEARSON'S R = -0.01138 SIGNIFICANCE = 0.4469

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF *
Q173 GRADE BY Q165 CAREER GOAL
* PAGE

Q173	Q165 A	B	C	D	ROW TOTAL
	1.	2.	3.	4.	
1.	0	12	42	10	64
A	0.	18.8	65.6	15.6	45.7
	0.	22.2	63.6	52.6	
	0.	8.6	30.0	7.1	
3.	1	42	24	9	76
C	1.3	55.3	31.6	11.8	54.3
	100.0	77.8	36.4	47.4	
	0.7	30.0	17.1	6.4	
COLUMN TOTAL	1	54	66	19	140
	0.7	38.6	47.1	13.6	100.0

CHI SQUARE = 21.75968 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0001
CRAMER'S V = 0.39424
CONTINGENCY COEFFICIENT = 0.36677
LAMBDA (ASYMMETRIC) = 0.29688 WITH Q173 DEPENDENT. = 0.24324 WITH Q165 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.26812
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.11931 WITH Q173 DEPENDENT. = 0.07999 WITH Q165
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09577
KENDALL'S TAU B = -0.31773 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.34980 SIGNIFICANCE = 0.0000
GAMMA = -0.52544
SOMERS'S D (ASYMMETRIC) = -0.28648 WITH Q173 DEPENDENT. = -0.35238 WITH Q165 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.31603
ETA = 0.39424 WITH Q173 DEPENDENT. = 0.30861 WITH Q165 DEPENDENT.
PEARSON'S R =-0.30861 SIGNIFICANCE = 0.0001

FILE LEE (CREATION DATE = 02-10-81)

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * *
Q173 GRADE BY Q118 D-6 CAREER GOAL
* PAGE

Q173		Q118 A	B	C	D	ROW TOTAL
	COUNT	1.	2.	3.	4.	
A	1.	1	14	34	13	62
	ROW PCT	1.6	22.6	54.8	21.0	44.9
	COL PCT	5.0	35.9	57.6	65.0	
	TOT PCT	0.7	10.1	24.6	9.4	
C	3.	19	25	25	7	76
	ROW PCT	25.0	32.9	32.9	9.2	55.1
	COL PCT	95.0	64.1	42.4	35.0	
	TOT PCT	13.8	18.1	18.1	5.1	
	COLUMN TOTAL	20	39	59	20	138
		14.5	28.3	42.8	14.5	100.0

CHI SQUARE = 21.27411 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0001
CRAMER'S V = 0.39263
CONTINGENCY COEFFICIENT = 0.36547
LAMBDA (ASYMMETRIC) = 0.24194 WITH Q173 DEPENDENT. = 0. WITH Q118 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.10638
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.13015 WITH Q173 DEPENDENT. = 0.06994 WITH Q118
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.09099
KENDALL'S TAU B = -0.34303 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.40244 SIGNIFICANCE = 0.0000
GAMMA = -0.56320
SOMERS'S D (ASYMMETRIC) = -0.28938 WITH Q173 DEPENDENT. = -0.40662 WITH Q118 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.33813
ETA = 0.39263 WITH Q173 DEPENDENT. = 0.37715 WITH Q118 DEPENDENT.
PEARSON'S R =-0.37715 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 2

FILE LEE (CREATION DATE = 02-10-81)

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * *
Q173 GRADE BY Q149 PROMOTION TO O-7
* PAGE

Q173	Q149 COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	7	29	24	3	63
		11.1	46.0	38.1	4.8	45.7
		53.8	58.0	40.0	20.0	
		5.1	21.0	17.4	2.2	
C	3.	6	21	36	12	75
		8.0	28.0	48.0	16.0	54.3
		46.2	42.0	60.0	80.0	
		4.3	15.2	26.1	8.7	
	COLUMN TOTAL	13	50	60	15	138
		9.4	36.2	43.5	10.9	100.0

CHI SQUARE = 8.17526 WITH 3 DEGREES OF FREEDOM SIGNIFICANCE = 0.0425
CRAMER'S V = 0.24339
CONTINGENCY COEFFICIENT = 0.23649
LAMBDA (ASYMMETRIC) = 0.14286 WITH Q173 DEPENDENT. = 0.06410 WITH Q149 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.09929
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.04476 WITH Q173 DEPENDENT. = 0.02585 WITH Q149
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03277
KENDALL'S TAU B = 0.21157 SIGNIFICANCE = 0.0041
KENDALL'S TAU C = 0.24197 SIGNIFICANCE = 0.0041
GAMMA = 0.36295
SOMERS'S D (ASYMMETRIC) = 0.18359 WITH Q173 DEPENDENT. = 0.24381 WITH Q149 DEPENDENT
SOMERS'S D (SYMMETRIC) = 0.20945
ETA = 0.24339 WITH Q173 DEPENDENT. = 0.21887 WITH Q149 DEPENDENT.
PEARSON'S R = 0.21887 SIGNIFICANCE = 0.0050

NUMBER OF MISSING OBSERVATIONS = 2

Q175	COUNT / ROW PCT / COL PCT / TOT PCT	Q120 A 1.	B 2.	C 3.	D 4.	ROW TOTAL
A	1.	1	8	14	12	35
		2.9	22.9	40.0	34.3	25.0
		11.1	18.6	24.1	40.0	
		0.7	5.7	10.0	8.6	
B	2.	5	18	26	17	66
		7.6	27.3	39.4	25.8	47.1
		55.6	41.9	44.8	56.7	
		3.6	12.9	18.6	12.1	
C	3.	0	10	14	1	25
		0.	40.0	56.0	4.0	17.9
		0.	23.3	24.1	3.3	
		0.	7.1	10.0	0.7	
D	4.	1	6	4	0	11
		9.1	54.5	36.4	0.	7.9
		11.1	14.0	6.9	0.	
		0.7	4.3	2.9	0.	
E	5.	2	1	0	0	3
		66.7	33.3	0.	0.	2.1
		22.2	2.3	0.	0.	
		1.4	0.7	0.	0.	
	COLUMN TOTAL	9	43	58	30	140
		6.4	30.7	41.4	21.4	100.0

CHI SQUARE = 35.68853 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0004
CRAMER'S V = 0.29150
CONTINGENCY COEFFICIENT = 0.45071
LAMBDA (ASYMMETRIC) = 0. WITH Q175 DEPENDENT. = 0.04878 WITH Q120 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.02564
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.08680 WITH Q175 DEPENDENT. = 0.09079 WITH Q120
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.08875
KENDALL'S TAU B = -0.25557 SIGNIFICANCE = 0.0002
KENDALL'S TAU C = -0.23184 SIGNIFICANCE = 0.0002
GAMMA = -0.37270
SOMERS'S D (ASYMMETRIC) = -0.25421 WITH Q175 DEPENDENT. = -0.25694 WITH Q120 DEPENDENT

Q177	COUNT / ROW PCT / COL PCT / TOT PCT	Q118 A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
A	1.	2	1	8	1	12
		16.7	8.3	66.7	8.3	8.8
		10.0	2.6	13.8	5.0	
		1.5	0.7	5.8	0.7	
B	2.	0	7	8	6	21
		0.	33.3	38.1	28.6	15.3
		0.	17.9	13.8	30.0	
		0.	5.1	5.8	4.4	
C	3.	2	9	12	3	26
		7.7	34.6	46.2	11.5	19.0
		10.0	23.1	20.7	15.0	
		1.5	6.6	8.8	2.2	
D	4.	7	9	2	2	20
		35.0	45.0	10.0	10.0	14.6
		35.0	23.1	3.4	10.0	
		5.1	6.6	1.5	1.5	
E	5.	7	5	14	1	27
		25.9	18.5	51.9	3.7	19.7
		35.0	12.8	24.1	5.0	
		5.1	3.6	10.2	0.7	
F	6.	1	5	10	4	20
		5.0	25.0	50.0	20.0	14.6
		5.0	12.8	17.2	20.0	
		0.7	3.6	7.3	2.9	
G	7.	1	3	1	0	5
		20.0	60.0	20.0	0.	3.6
		5.0	7.7	1.7	0.	
		0.7	2.2	0.7	0.	
	COLUMN TOTAL	20	39	58	20	137
		14.6	28.5	42.3	14.6	100.0

(CONTINUED)

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *
Q177 YEAR COMMISSIONED BY Q118 O-6 CAREER GOAL
* PAGE

Q177	Q118: COUNT / ROW PCT / COL PCT / TOT PCT	A 1.	B 2.	C 3.	D 4.	ROW TOTAL
H	8.	0	0	1	2	3
		0.	0.	33.3	66.7	2.2
		0.	0.	1.7	10.0	
		0.	0.	0.7	1.5	
I	9.	0	0	1	0	1
		0.	0.	100.0	0.	0.7
		0.	0.	1.7	0.	
		0.	0.	0.7	0.	
J	10.	0	0	1	1	2
		0.	0.	50.0	50.0	1.5
		0.	0.	1.7	5.0	
		0.	0.	0.7	0.7	
	COLUMN TOTAL	20	39	58	20	137
		14.6	28.5	42.3	14.6	100.0

CHI SQUARE = 46.34840 WITH 27 DEGREES OF FREEDOM SIGNIFICANCE = 0.0117
CRAMER'S V = 0.33581
CONTINGENCY COEFFICIENT = 0.50278
LAMBDA (ASYMMETRIC) = 0.08182 WITH Q177 DEPENDENT. = 0.12658 WITH Q118 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.10053
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.09197 WITH Q177 DEPENDENT. = 0.14334 WITH Q118
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.11205
KENDALL'S TAU B = -0.02756 SIGNIFICANCE = 0.3457
KENDALL'S TAU C = -0.02827 SIGNIFICANCE = 0.3457
GAMMA = -0.03528
SOMERS'S D (ASYMMETRIC) = -0.03042 WITH Q177 DEPENDENT. = -0.02497 WITH Q118 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.02743
ETA = 0.05906 WITH Q177 DEPENDENT. = 0.43152 WITH Q118 DEPENDENT.
PEARSON'S R = 0.00833 SIGNIFICANCE = 0.4615

NUMBER OF MISSING OBSERVATIONS = 3

FILE LEE (CREATION DATE = 02-12-81)

* * * * * * * * * * * * * * * * * * C R O S S T A B U L A T I O N O F * * * * * * * * * * * * * * *

Q178 RATING BY Q154 RETIRE

* PAGE

Q178	COUNT / ROW PCT / COL PCT / TOT PCT	Q154 A 1	B 2	C 3	D 4	ROW TOTAL
A	1	0	4	46	13	63
		0.	6.3	73.0	20.6	45.0
		0.	15.4	52.3	54.2	
		0.	2.9	32.9	9.3	
B	2	1	8	14	4	27
		3.7	29.6	51.9	14.8	19.3
		50.0	30.8	15.9	16.7	
		0.7	5.7	10.0	2.9	
C	3	1	14	28	7	50
		2.0	28.0	56.0	14.0	35.7
		50.0	53.8	31.8	29.2	
		0.7	10.0	20.0	5.0	
	COLUMN TOTAL	2	26	88	24	140
		1.4	18.6	62.9	17.1	100.0

RAW CHI SQUARE = 13.98156 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0298
CRAMER'S V = 0.22346
CONTINGENCY COEFFICIENT = 0.30133
LAMBDA (ASYMMETRIC) = 0.14286 WITH Q178 DEPENDENT. = 0. WITH Q154 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08527
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.05370 WITH Q178 DEPENDENT. = 0.05797 WITH Q154
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.05575
KENDALL'S TAU B = -0.21194. SIGNIFICANCE = 0.0029
GAMMA = -0.34665
SOMERS'S D (ASYMMETRIC) = -0.22925 WITH Q178 DEPENDENT. = -0.19594 WITH Q154 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.21129
ETA = 0.27282 WITH Q178 DEPENDENT. = 0.26260 WITH Q154 DEPENDENT.
PEARSON'S R =-0.23097 SIGNIFICANCE = 0.0030

FILE LEE (CREATION DATE = 02-12-81)

* CROSSTABULATION OF *

Q179 SOURCE OF COMISSION BY Q149 PROMOTION TO O-7

* PAGE 1

Q179	COUNT / ROW PCT / COL PCT / TOT PCT	Q149 A	B	C	D	ROW TOTAL
A	1	6	32	32	6	76
		7.9	42.1	42.1	7.9	55.1
		46.2	64.0	53.3	40.0	
		4.3	23.2	23.2	4.3	
B	2	1	9	9	2	21
		4.8	42.9	42.9	9.5	15.2
		7.7	18.0	15.0	13.3	
		0.7	6.5	6.5	1.4	
C	3	0	2	7	6	15
		0.	13.3	46.7	40.0	10.9
		0.	4.0	11.7	40.0	
		0.	1.4	5.1	4.3	
D	4	6	7	12	1	26
		23.1	26.9	46.2	3.8	18.8
		46.2	14.0	20.0	6.7	
		4.3	5.1	8.7	0.7	
	COLUMN TOTAL	13	50	60	15	138
		9.4	36.2	43.5	10.9	100.0

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RAW CHI SQUARE = 24.65950 WITH 9 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0034

CRAMER'S V = 0.24406

CONTINGENCY COEFFICIENT = 0.38936

LAMBDA (ASYMMETRIC) = 0. WITH Q179 DEPENDENT. = 0. WITH Q149 DEPENDENT.

LAMBDA (SYMMETRIC) = 0.

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.06515 WITH Q179 DEPENDENT. = 0.06390 WITH Q149 DEPENDENT.

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.06452

KENDALL'S TAU B = 0.05150. SIGNIFICANCE = 0.2458

KENDALL'S TAU C = 40.40907. SIGNIFICANCE = 0.0000

GAMMA = 0.07838

SOMERS'S D (ASYMMETRIC) = 0.05020 WITH Q179 DEPENDENT. = 0.05283 WITH Q149 DEPENDENT.

SOMERS'S D (SYMMETRIC) = 0.05148

ETA = 0.19753 WITH Q179 DEPENDENT. = 0.32348 WITH Q149 DEPENDENT.

PEARSON'S R = 0.01528 SIGNIFICANCE = 0.4294

FILE LEE (CREATION DATE = 02-09-81)

* CROSSTABULATION OF *
Q118 0-6 CAREER GOAL BY Q164 CAREER INTENT
* PAGE

Q118	COUNT / ROW PCT / COL PCT / TOT PCT	Q164 A	B	C	D	E	ROW TOTAL
		1.	2.	3.	4.	5.	
A	1.	0	0	10	7	3	20
		0.	0.	50.0	35.0	15.0	14.5
		0.	0.	13.9	35.0	33.3	
		0.	0.	7.2	5.1	2.2	
B	2.	0	2	22	11	4	39
		0.	5.1	56.4	28.2	10.3	28.3
		0.	7.4	30.6	55.0	44.4	
		0.	1.4	15.9	8.0	2.9	
C	3.	5	19	32	1	2	59
		8.5	32.2	54.2	1.7	3.4	42.8
		50.0	70.4	44.4	5.0	22.2	
		3.6	13.8	23.2	0.7	1.4	
D	4.	5	6	8	1	0	20
		25.0	30.0	40.0	5.0	0.	14.5
		50.0	22.2	11.1	5.0	0.	
		3.6	4.3	5.8	0.7	0.	
COLUMN TOTAL		10 7.2	27 19.6	72 52.2	20 14.5	9 6.5	138 100.0

CHI SQUARE = 51.86806 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.35396
CONTINGENCY COEFFICIENT = 0.52267
LAMBDA (ASYMMETRIC) = 0.15190 WITH Q118 DEPENDENT. = 0. WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.08276
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.16994 WITH Q118 DEPENDENT. = 0.16649 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.16819
KENDALL'S TAU B = -0.48405 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.43688 SIGNIFICANCE = 0.0000
GAMMA = -0.68783
SOMERS'S D (ASYMMETRIC) = -0.49721 WITH Q118 DEPENDENT. = -0.47123 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.48387
ETA = 0.54533 WITH Q118 DEPENDENT. = 0.54445 WITH Q164 DEPENDENT.
PEARSON'S R =-0.52407 SIGNIFICANCE = 0.0000

FILE LEE (CREATION DATE = 02-09-81)

* * * * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * *
Q120 MAANDATORY RETIREMENT BY Q164 CAREER INTENT
* PAGE

Q120	Q164 A	B	C	D	E	ROW TOTAL
1.	3	3	3	0	0	9
A	33.3	33.3	33.3	0.	0.	6.4
	27.3	11.1	4.1	0.	0.	
	2.1	2.1	2.1	0.	0.	
2.	6	16	17	4	0	43
B	14.0	37.2	39.5	9.3	0.	30.7
	54.5	59.3	23.3	20.0	0.	
	4.3	11.4	12.1	2.9	0.	
3.	2	8	39	6	3	58
C	3.4	13.8	67.2	10.3	5.2	41.4
	18.2	29.6	53.4	30.0	33.3	
	1.4	5.7	27.9	4.3	2.1	
4.	0	0	14	10	6	30
D	0.	0.	46.7	33.3	20.0	21.4
	0.	0.	19.2	50.0	66.7	
	0.	0.	10.0	7.1	4.3	
COLUMN TOTAL	11 7.9	27 19.3	73 52.1	20 14.3	9 6.4	140 100.0

CHI SQUARE = 55.03020 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.36197
CONTINGENCY COEFFICIENT = 0.53119
LAMBDA (ASYMMETRIC) = 0.23171 WITH Q120 DEPENDENT. = 0. WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.12752
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.16728 WITH Q120 DEPENDENT. = 0.15745 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.16222
KENDALL'S TAU B = 0.48713 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.43646 SIGNIFICANCE = 0.0000
GAMMA = 0.68723
SOMERS'S D (ASYMMETRIC) = 0.49583 WITH Q120 DEPENDENT. = 0.47859 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.48706
ETA = 0.55148 WITH Q120 DEPENDENT. = 0.54645 WITH Q164 DEPENDENT.
PEARSON'S R = 0.54240 SIGNIFICANCE = 0.0000

Q141	COUNT / ROW PCT / COL PCT / TOT PCT	Q164 A (1.)	B (2.)	C (3.)	D (4.)	E (5.)	ROW TOTAL
1.		0	1	9	5	5	20
A		0.	5.0	45.0	25.0	25.0	14.3
		0.	3.7	12.3	25.0	55.6	
		0.	0.7	6.4	3.6	3.6	
2.		1	6	23	8	3	41
B		2.4	14.6	56.1	19.5	7.3	29.3
		9.1	22.2	31.5	40.0	33.3	
		0.7	4.3	16.4	5.7	2.1	
3.		5	19	37	6	1	68
C		7.4	27.9	54.4	8.8	1.5	48.6
		45.5	70.4	50.7	30.0	11.1	
		3.6	13.6	26.4	4.3	0.7	
4.		5	1	4	1	0	11
D		45.5	9.1	36.4	9.1	0.	7.9
		45.5	3.7	5.5	5.0	0.	
		3.6	0.7	2.9	0.7	0.	
COLUMN TOTAL		11 / 7.9	27 / 19.3	73 / 52.1	20 / 14.3	9 / 6.4	140 / 100.0

CHI SQUARE = 47.74387 WITH 12 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.33716
CONTINGENCY COEFFICIENT = 0.50428
LAMBDA (ASYMMETRIC) = 0.08333 WITH Q141 DEPENDENT. = 0.01493 WITH Q164 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05036
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.11243 WITH Q141 DEPENDENT. = 0.10189 WITH Q164
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.10690
KENDALL'S TAU B = -0.36992 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.32354 SIGNIFICANCE = 0.0000
GAMMA = -0.54541
SOMERS'S D (ASYMMETRIC) = -0.36754 WITH Q141 DEPENDENT. = -0.37232 WITH Q164 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.36992
ETA = 0.45691 WITH Q141 DEPENDENT. = 0.44865 WITH Q164 DEPENDENT.
PEARSON'S R = -0.44751 SIGNIFICANCE = 0.0000

Q164	COUNT / ROW PCT / COL PCT / TOT PCT	Q172 A	B	C	D	E	F	G	ROW TOTAL
		1.	2.	3.	4.	5.	6.	7.	
A	1.	1	1	1	1	1	1	5	11
		9.1	9.1	9.1	9.1	9.1	9.1	45.5	7.9
		4.5	3.8	7.7	4.5	8.3	6.7	16.7	
		0.7	0.7	0.7	0.7	0.7	0.7	3.6	
B	2.	1	6	4	3	4	3	6	27
		3.7	22.2	14.8	11.1	14.8	11.1	22.2	19.3
		4.5	23.1	30.8	13.6	33.3	20.0	20.0	
		0.7	4.3	2.9	2.1	2.9	2.1	4.3	
C	3.	14	13	7	17	3	4	15	73
		19.2	17.8	9.6	23.3	4.1	5.5	20.5	52.1
		63.6	50.0	53.8	77.3	25.0	26.7	50.0	
		10.0	9.3	5.0	12.1	2.1	2.9	10.7	
D	4.	6	4	1	1	3	3	2	20
		30.0	20.0	5.0	5.0	15.0	15.0	10.0	14.3
		27.3	15.4	7.7	4.5	25.0	20.0	6.7	
		4.3	2.9	0.7	0.7	2.1	2.1	1.4	
E	5.	0	2	0	0	1	4	2	9
		0.	22.2	0.	0.	11.1	44.4	22.2	6.4
		0.	7.7	0.	0.	8.3	26.7	6.7	
		0.	1.4	0.	0.	0.7	2.9	1.4	
COLUMN TOTAL		22	26	13	22	12	15	30	140
		15.7	18.6	9.3	15.7	8.6	10.7	21.4	100.0

CHI SQUARE = 36.50507 WITH 24 DEGREES OF FREEDOM SIGNIFICANCE = 0.0490
CRAMER'S V = 0.25532
CONTINGENCY COEFFICIENT = 0.45478
LAMBDA (ASYMMETRIC) = 0.01493 WITH Q164 DEPENDENT. = 0.07273 WITH Q172 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05085
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.10022 WITH Q164 DEPENDENT. = 0.06934 WITH Q172
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.08197
KENDALL'S TAU B = -0.09398 SIGNIFICANCE = 0.0862
KENDALL'S TAU C = -0.08763 SIGNIFICANCE = 0.0862
GAMMA = -0.12416
SOMERS'S D (ASYMMETRIC) = -0.08318 WITH Q164 DEPENDENT. = -0.10618 WITH Q172 DEPENDENT.

Q120	COUNT / ROW PCT / COL PCT / TOT PCT	Q141 A (1.)	B (2.)	C (3.)	D (4.)	ROW TOTAL
A	1.	1	0	4	4	9
		11.1	0.	44.4	44.4	6.4
		5.0	0.	5.9	36.4	
		0.7	0.	2.9	2.9	
B	2.	2	5	33	3	43
		4.7	11.6	76.7	7.0	30.7
		10.0	12.2	48.5	27.3	
		1.4	3.6	23.6	2.1	
C	3.	4	29	23	2	58
		6.9	50.0	39.7	3.4	41.4
		20.0	70.7	33.8	18.2	
		2.9	20.7	16.4	1.4	
D	4.	13	7	8	2	30
		43.3	23.3	26.7	6.7	21.4
		65.0	17.1	11.8	18.2	
		9.3	5.0	5.7	1.4	
	COLUMN TOTAL	20	41	68	11	140
		14.3	29.3	48.6	7.9	100.0

CHI SQUARE = 66.70390 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.39852
CONTINGENCY COEFFICIENT = 0.56807
LAMBDA (ASYMMETRIC) = 0.25610 WITH Q120 DEPENDENT. = 0.15278 WITH Q141 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.20779
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.16320 WITH Q120 DEPENDENT. = 0.16951 WITH Q141
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.16630
KENDALL'S TAU B = -0.41601 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.37034 SIGNIFICANCE = 0.0000
GAMMA = -0.57816
SOMERS'S D (ASYMMETRIC) = -0.42618 WITH Q120 DEPENDENT. = -0.40609 WITH Q141 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.41589
ETA = 0.44977 WITH Q120 DEPENDENT. = 0.44762 WITH Q141 DEPENDENT.
PEARSON'S R = -0.44708 SIGNIFICANCE = 0.0000

Q149	COUNT / ROW PCT / COL PCT / TOT PCT	Q165 A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
1.		0	0	12	1	13
A		0.	0.	92.3	7.7	9.4
		0.	0.	18.5	5.3	
		0.	0.	8.7	0.7	
2.		0	11	33	6	50
B		0.	22.0	66.0	12.0	36.2
		0.	20.8	50.8	31.6	
		0.	8.0	23.9	4.3	
3.		0	29	19	12	60
C		0.	48.3	31.7	20.0	43.5
		0.	54.7	29.2	63.2	
		0.	21.0	13.8	8.7	
4.		1	13	1	0	15
D		6.7	86.7	6.7	0.	10.9
		100.0	24.5	1.5	0.	
		0.7	9.4	0.7	0.	
COLUMN TOTAL		1	53	65	19	138
		0.7	38.4	47.1	13.8	100.0

CHI SQUARE = 49.22612 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.34482
CONTINGENCY COEFFICIENT = 0.51276
LAMBDA (ASYMMETRIC) = 0.19231 WITH Q149 DEPENDENT. = 0.30137 WITH Q165 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.24503
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.15855 WITH Q149 DEPENDENT. = 0.18361 WITH Q165
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.17016
KENDALL'S TAU B = -0.33828 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = -0.28635 SIGNIFICANCE = 0.0000
GAMMA = -0.50732
SOMERS'S D (ASYMMETRIC) = -0.35113 WITH Q149 DEPENDENT. = -0.32590 WITH Q165 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.33804
ETA = 0.53454 WITH Q149 DEPENDENT. = 0.40642 WITH Q165 DEPENDENT.
PEARSON'S R = -0.36044 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 2

Q118	COUNT / ROW PCT / COL PCT / TOT PCT	Q165 A	B	C	D	ROW TOTAL
		1.	2.	3.	4.	
A	1.	0	20	0	0	20
		0.	100.0	0.	0.	14.5
		0.	37.0	0.	0.	
		0.	14.5	0.	0.	
B	2.	0	21	11	7	39
		0.	53.8	28.2	17.9	28.3
		0.	38.9	17.2	36.8	
		0.	15.2	8.0	5.1	
C	3.	1	11	37	10	59
		1.7	18.6	62.7	16.9	42.8
		100.0	20.4	57.8	52.6	
		0.7	8.0	26.8	7.2	
D	4.	0	2	16	2	20
		0.	10.0	80.0	10.0	14.5
		0.	3.7	25.0	10.5	
		0.	1.4	11.6	1.4	
	COLUMN TOTAL	1	54	64	19	138
		0.7	39.1	46.4	13.8	100.0

CHI SQUARE = 57.31048 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.0000
CRAMER'S V = 0.37206
CONTINGENCY COEFFICIENT = 0.54169
LAMBDA (ASYMMETRIC) = 0.12658 WITH Q118 DEPENDENT. = 0.40541 WITH Q165 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.26144
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.18762 WITH Q118 DEPENDENT. = 0.23271 WITH Q165
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.20775
KENDALL'S TAU B = 0.40720 SIGNIFICANCE = 0.0000
KENDALL'S TAU C = 0.35441 SIGNIFICANCE = 0.0000
GAMMA = 0.57957
SOMERS'S D (ASYMMETRIC) = 0.43376 WITH Q118 DEPENDENT. = 0.38227 WITH Q165 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.40639
ETA = 0.59989 WITH Q118 DEPENDENT. = 0.47693 WITH Q165 DEPENDENT.
PEARSON'S R = 0.43705 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 2

FILE LEE (CREATION DATE = 02-10-81)

* CROSSTABULATION OF * * * * * * * * * * * * * * * *
Q176 YEARS TO RETIREMENT BY Q165 CAREER GOAL
* PAGE

Q176	COUNT / ROW PCT / COL PCT / TOT PCT	Q165 A (1.)	B (2.)	C (3.)	D (4.)	ROW TOTAL
1.		0	7	15	6	28
A		0.	25.0	53.6	21.4	20.0
		0.	13.0	22.7	31.6	
		0.	5.0	10.7	4.3	
2.		0	10	22	4	36
B		0.	27.8	61.1	11.1	25.7
		0.	18.5	33.3	21.1	
		0.	7.1	15.7	2.9	
3.		1	31	26	9	67
C		1.5	46.3	38.8	13.4	47.9
		100.0	57.4	39.4	47.4	
		0.7	22.1	18.6	6.4	
4.		0	6	3	0	9
D		0.	66.7	33.3	0.	6.4
		0.	11.1	4.5	0.	
		0.	4.3	2.1	0.	
COLUMN TOTAL		1 / 0.7	54 / 38.6	66 / 47.1	19 / 13.6	140 / 100.0

CHI SQUARE = 12.12879 WITH 9 DEGREES OF FREEDOM SIGNIFICANCE = 0.2061
CRAMER'S V = 0.16994
CONTINGENCY COEFFICIENT = 0.28236
LAMBDA (ASYMMETRIC) = 0. WITH Q176 DEPENDENT. = 0.10811 WITH Q165 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.05442
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03998 WITH Q176 DEPENDENT. = 0.04666 WITH Q165
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.04306
KENDALL'S TAU B = -0.21674 SIGNIFICANCE = 0.0021
KENDALL'S TAU C = -0.18354 SIGNIFICANCE = 0.0021
GAMMA = -0.33767
SOMERS'S D (ASYMMETRIC) = -0.22547 WITH Q176 DEPENDENT. = -0.20834 WITH Q165 DEPENDENT.
SOMERS'S D (SYMMETRIC) = -0.21657
ETA = 0.24829 WITH Q176 DEPENDENT. = 0.23945 WITH Q165 DEPENDENT.
PEARSON'S R = -0.23420 SIGNIFICANCE = 0.0027

FILE LEE (CREATION DATE = 02-13-81)

* CROSSTABULATION OF *
Q178 RATING BY Q130 MANDATORY REQUIREMENT
* PAGE

		Q130				
	COUNT / ROW PCT / COL PCT / TOT PCT	A	B	C	D	ROW TOTAL
		1	2	3	4	
Q178						
	1	5	17	31	9	62
A		8.1	27.4	50.0	14.5	44.6
		55.6	65.4	43.1	28.1	
		3.6	12.2	22.3	6.5	
	2	1	2	17	7	27
B		3.7	7.4	63.0	25.9	19.4
		11.1	7.7	23.6	21.9	
		0.7	1.4	12.2	5.0	
	3	3	7	24	16	50
C		6.0	14.0	48.0	32.0	36.0
		33.3	26.9	33.3	50.0	
		2.2	5.0	17.3	11.5	
	COLUMN TOTAL	9	26	72	32	139
		6.5	18.7	51.8	23.0	100.0

RAW CHI SQUARE = 10.15655 WITH 6 DEGREES OF FREEDOM. SIGNIFICANCE = 0.1182
CRAMER'S V = 0.19114
CONTINGENCY COEFFICIENT = 0.26095
LAMBDA (ASYMMETRIC) = 0.09091 WITH Q178 DEPENDENT. = 0. WITH Q130 DEPENDENT.
LAMBDA (SYMMETRIC) = 0.04861
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.03628 WITH Q178 DEPENDENT. = 0.03245 WITH Q130
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.03426
KENDALL'S TAU B = 0.19412. SIGNIFICANCE = 0.0052
KENDALL'S TAU C = ********. SIGNIFICANCE = 0.0000
GAMMA = 0.30335
SOMERS'S D (ASYMMETRIC) = 0.19327 WITH Q178 DEPENDENT. = 0.19497 WITH Q130 DEPENDENT.
SOMERS'S D (SYMMETRIC) = 0.19411
ETA = 0.22195 WITH Q178 DEPENDENT. = 0.22493 WITH Q130 DEPENDENT.
PEARSON'S R = 0.19656 SIGNIFICANCE = 0.0102

NUMBER OF MISSING OBSERVATIONS = 1

APPENDIX I

POSITIVE FACTORS

WRITTEN RESPONSES TO QUESTION 190--THREE MOST POSITIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 1 FACTOR

1A. Job Satisfaction

Job satisfaction. (18)*
Sense of accomplishment. (2)
Knowing I am doing something important and worthwhile.
Opportunity for job satisfaction.
Meaningful work.
Job enrichment.
Personal/professional job enrichment.
Job fulfillment.
Sense of mission/contribution.
Contributor to elite group/mission.

1B. Flying

Flying. (5)
Operational flying.
Flying duty.
Chance to fly.
Enjoy flying airplanes.
Flying fighters.
Flying Airplanes.
Opportunity to fly fighters.

1C. Challenge (of the job)

Challenge. (3)
Challenging, rewarding jobs. (2)
Professional challenge.
The challenge--playing a significant part in the leadership/management of a key part of the USAF mission.
Continuing challenge; flying, leadership opportunities, different assignments.
Challenging assignments.
Challenge and responsibility.
Opportunity for challenging jobs.
Varied and challenging jobs.
Challenging mission.

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*Parenthetical numbers indicate the number of times a particular response appeared; e.g., Job satisfaction was listed as the number one factor 18 times.

1D. Responsibility (of the job)

Responsibility. (4)
Job responsibility. (5)
Responsibility of the job. (2)
Responsibility level.
Responsibility for important activities.
Job responsibility commensurate with skill level.

1E. Job Opportunities

Job opportunities. (2)
Job opportunities and locations.
Rewarding job opportunities.
Job opportuinties to include variety and movement.
Opportunity (type of job)
Responsible job opportunities.

1F. The Job Itself

The job.
Job and working environment.
Good jobs.
Mission.

2. People

People. (2)
The people I associate with. (2)
Your peers (the people you work with).
Caliber of people.
Camaraderie
The people you meet and tne friends you keep--the closeness of military life.
The people you work with.
The people/camaraderie.
Quality of people you work/live around.
Association with dedicated folk.
Generally, the dedication of fellow AF members.

3. Service to Nation

Duty to country. (2)
Opportunity to serve my country. (2)
Service to country. (2)
Service to nation.
Sense of duty.
A sense of service.
Feeling of self worth; providing a needed service to country.
Patriotism

Sense of service to country.
Support of a common objective (defense of country).
Respect, esteem of country.
Sense of serving a worthy cause.
Opportunity for an exciting and meaningful job--service to country.

4. Retirement System

Retirement.
Retirement system.
Retirement benefits.
Retirement pay and benefits.
Pension.
Retirement program.
Retirement income.
Retirement benefits/active duty benefits.
20 year retirement.
Retirement system allowing second career.

5. Travel

Travel. (7)

6. Pay/Benefits

No responses as a number one factor.

7. Advancement/Promotion

Promotion in rank and responsibility.
Opportunity to advance in rank and responsibility.
Promotion.

8. Leadership Opportunities

Chance for leadership.
Opportunity for leadership and command.
Leadership opportunities.

9. Security

Security. (2)
Job security.

10. Professionalism

Professionalism.
Professional pride.

11. Way of Life

The way of life.

12. Educational Opportunities

Continuing educational opportunities.

13. Impact on Family

No responses as a number one factor.

14. No Positive Factors

Does not have any strong, positive factors.

15. Status/Pride

No responses as a number one factor.

16. Stability

No responses as a number one factor.

17. No Number 3

No responses as a number one factor (obviously).

18. Leave

No responses as a number one factor.

WRITTEN RESPONSES TO QUESTION 190--THREE MOST POSITIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 2 FACTOR

1A. Job Satisfaction

Job satisfaction. (10)
A sense of fulfillment.
Ability to achieve results; influence decisions.
Feeling of doing a worthwhile job.
Job satisfaction--sometimes depends on your boss.
Some jobs are really worth doing.
Rewarding experiences.
Utilization of talents.

1B. Flying

Flying. (10)
Opportunity to fly.

1C. Challenge (of the job)

Challenging assignments.
Active competitive and changing environmnet.
Challenging opportunities.
Challenging work environment.

1D. Responsibility (of the job)

Responsibility.
Ability to assume responsibility and initiative.
Job responsibility.
Responsibility and attendant authority.

1E. Job Opportunities

No responses as a number two factor.

1F. The Job Itself

Interesting work.
Interesting job.
Jobs held.

1G. Job Diversity

Variety--types of jobs and locations
Job diversity. (2)
Diversity
Broad variety of increasingly challenging assignments.
Challenging variety vs civilian ruts.
Variety of jobs.

1 H. Job Technology

Involvement with state of the art technology.

2. The People

Interpersonal relationships.
Friendships developed.
Quality of career personnel to work with.
Working with the finest people in the U.S.
Friends around the world.
Social life.
People I work with.
Super associations--professional and personal.
Making many good friends.
Camaraderie of fighter pilot fraternity.
Working relationships.
People. (2)
Camaraderie.
Quality of people.
Unit identification and sense of belonging.
Meeting and working with good but different people.
Work with bright, well-informed people.

3. Service to Nation

Service to nation.
Service to country. (2)
Satisfaction from serving country--making a contribution
Patriotism.
Sense of purpose.
Important job--patriotism, etc..
Sense of serving my country.
The mission and contribution to our society.
Opportunity to serve country.

4. Retirement System

Retirement. (3)
Retirement program. (2)
Early (20 yr.) retirement.
Opportunity for early retirement.
Early retirement.
Retirement system.
Military retirement.
Retirement system (20-30 yr. options).

5. Travel

Travel. (4)
Travel opportunities. (2)

6. Pay/Benefits

Pay and allowances. (2)
Money
Pay.(5)
Allowances.
Fringe benefits including recreational opportunities
Family medical care.
Medical Benefits.

7. Advancement/Promotion

Opportunity to progress thru hard work and study.
Reasonably rapid promotions.
Opportunities for advancement.
Advancement.
Equal opportunity.
Early promotion.
Promotion opportunities.

8. Leadership Opportunities

The authority vested in positions of increasing responsibility.
Leadership opportunities. (4)
Leadership responsibilities.
Opportunity to lead early in career.
Being able to be a leader.

9. Security

Job security. (3)
Career Stability.
Security for family--present and future
Security.

10. Professionalism

The relationship to other professionals.
Working with other professionals.
Belonging to a highly professional organization.
Working with professional peers.
Membership in a profession.
Pride in being a professional.(2)

11. Way of Life

Way of life.
Military.
Family reasonably happy with military life/lifestyle.
(cosmopolitan with sense of community.)

12. Education Opportunities

Education Opportunities.

13. Impact on Family

No responses as a number 2 factor.

14. No Positive Factors

Does not have any strong, positive factors.

15. Status/Pride

No responses as a number 2 factor.

16. Stability

Stability

17. No Number 3

Obviously, no responses as a number 2 factor.

18. Leave

No responses as a number 2 factor.

WRITTEN RESPONSES TO QUESTION 190--THREE MOST POSITIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 3 FACTOR

1A. Job Satisfaction

Job satisfaction. (6)
Influence of policy.
Psychic reward.
Enjoyment.
Excitement of an AF career--never a dull moment

1B. Flying

Flying. (2)
Enjoyed flying

1C. Challenge (of the job)

Challenge. (4)
Challenging jobs. (4)
Challenge of the job assigned.
A career that stimulates and challenges on individual.

1D. Responsibility (of the job)

High degree of responsibility in my job.

1E. Job Opportunities

Challenging job opportunities.

1F. The Job Itself

Good type of job.
Interesting work.
Exciting, interesting job.
When you are lucky, a good job.

1G. Job Diversity

Opportunity to do a variety of jobs.
Opportunity to have a broad career with many different jobs in different locations.
Different job experiences.
Varied assignments.

1H. Job Technology

No responses as a number 3 factor.

2. The People

Great people.
Social relationships.
People. (5)
Working with good people.
Corporate esprit de corps.
Camaraderie. (3)
People you work with. (2)
Dedication of career personnel.
Comradeship.
People to people relationships.
Working with a great group of people.
AF way of life (camaraderie and esprit)
Quality of people I work with.

3. Service to Nation

Serve my country. (2)
Patriotism.
Service to country. (4)
Patriotism fulfillment. (2)
Sense of contributing to the country. (2)
Respect of public.
Psychic rewards of service.
Contribution to nation.
Opportunity to serve a great cause--my country.
Sense of duty.
Satisfaction thru service to country.

4. Retirement System

Retirement at early age. (2)
Early retirement and a financial base for a future career.
Retirement program. (3)
Retirement benefits. (3)
Retirement. (2)
Long term security aspects of the military retirement system.
Retirement options.
Decent retirement plan.

5. Travel

Travel. (9)
Travel opportunities.
Opportunity to travel.
Changing jobs/locations.
Location.
Travel within reason.
Travel earlier in career.

6. Pay/Benefits

Pay. (2)
Pay and Benefits.
Increased priviledges and benefits.
Benefits.
Medical benefits. (3)

7. Advancement/Promotion

Promotion.
Advancement opportunities. (2)
Career progression.
Opportunity to advance based on individual performance.

8. Leadership Opportunities

Command opportunity.
Opportunity to command a flying organization.

9. Security

Job Security. (2)
Security. (3)

10. Professionalism

No responses as a number 3 factor.

11. Way of Life

No responses as a number 3 factor.

12. Education Opportunities

Education. (5)

13. Impact on Family

Ability to provide my family a secure future.
In many ways it is good for my family.
Education for children, i.e., new places, new friends.
Family support, growth.
The manner in which senior leaderhip shows concern for family related issues.
Time to spend with my family.

14. No positive Factors

Does not have any strong positive factors.

15. Status/Pride

Belonging to an organization with the great history of the Air Force (pride).
Status.
Prestige.
Recognition.

16. Stability

Stability.

17. No Number 3

No number 3. (2)

18. Leave

Initially, the 30-days' leave (some industries provide their upper executives 5-6 weeks leave today).

APPENDIX J

NEGATIVE FACTORS

WRITTEN RESPONSES TO QUESTION 191--THREE MOST NEGATIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 1 FACTOR

1A. Inadequate Pay and Allowances

Pay, allowances--compensation in general, compared to what I've seen in civilian sector.
Pay.(8)
Low pay. (3)
Compensation. (2)
Pay and allowances. (5)
Pay, to include relocation allowances.
Insufficient pay and benefits compared to my contemporaries in civilian industry.
Uncertainty of adequate pay. Many equate the military to ministers. They expect us to live on patriotism, the flag and mom's apple pie.
Inadequate pay and allowances for services provided.
Arbitrary compensation/benefit adjustments.
Inadequate compensation.
The lack of significant pay and benefits which reflects a continuing lack of respect by the country/government for the military role in a viable national security posture.
Archaic compensation and benefits package.
Pay disparity.
Relative deterioration of pay and benefits.
Compensation not responsive to inflation.
Pay caps during inflation.
Inadequate compensation to offset inflation.
Proper compensation.
Pay vs cost of living.
Inability to keep income in pace with economy.
Compensation below inflation rate.
Pay inadequate.

1B. Eroding Benefits

Poor medical service and no dental care for dependents.
Erosion of benefits. (2)
Decrease and loss of benefits and privileges.
Lack of dental care for dependents.

1C. Moving Costs

High cost of PCS moves.
Frequent moves and cost.
Moving costs.
Moving and receiving major damage with very little compensation. The "I don't care" attitude of moving companies plus cost of moving--DLA=1 month's quarters--just don't hack it.

2A. Management Related

Centralized control and management.
Unrealistic controls through micromanagement.
Management. (2)
Micromanagement. (3)
Poor senior management (at least in my career field).
Lack of participative management
Still too centralized at wing level.
Over-management--too much cover your _____.

2B. Leadership Related

Indifferent or negative attitude of civilian leadership.
Lack of military leaders' willingness to stand up to political leaders.
Weak leadership.
SAC leadership (too old-fashioned).
Lack of senior leadership (more leaders, fewer managers).
Make-work leadership philosophy.

2C. Policy Related

Personnel policies.
Stupid management tools--such as 1-2-3 OER.
Uncertainty; rules keep changing.
Short term management (1-2-3 OER to kill inflation).

3A. Instability

Frequent TDY and separation.
Family separation (6).
Job caused family separation.
Family disruption.
Period of maximum moving is at worst possible time for family (teenaged children).
Disruption to family.
Disruption of family life/schooling/separations.
Instability. (2)
Lack of tour stability.
Family separation (moving).
Disruption of family (moves/separations).
School age kids and changing school.
Lack of assignment stability.
PCS moves/ family stability.

3B. Moving

Moving.
Constant moving.
Frequent moves.
Constant jobs, location change.

4. No Control Over Assignments

Staff assignment.
Remote assignments. (3)
No control of assignments.
Lack of say in assignment location.
The "political" nature of 06 and general-officer assignments and promotions.
Unaccompanied tours in peacetime.
No control over future. (2)
Inability to determine career.
Lack of control over assignments that can be achieved within normal assignment practices (without asking general officer for help).
Lack of control over assignments.
Lack of control over where I want to go and how often.
Assignment control.

5. Promotion/Advancement

Promotion uncertainty.
Lack of adequate promotion opportunity to O-7.
Opportunity for progression.
Lack of adequate promotion opportunity to general officer for nonrated
Promotion system.
Complete disregard for potential vs politics.
Leaders too promotion oriented vs USAF oriented.
Do-gooders and fair-haired boys trying to lie, cheat, and steal to get ahead of their peers.
Overemphasis on careerism by too many officers.

6. Lack of Prestige/Appreciation

Lack of appreciation by public and Congress.
Barrier between military and civilian economy.
Lack of recognition and prestige by civilian sector.
Public indifference toward career military personnel.
American public's low opinion of value of military career.
Lack of civilian respect for military.

7. Resource Deficiencies

Lack of parts and supplies.

8. The Job

Boring job.
Lack of job commensurate with ability.
Non-use of training/talents.

9. Navigator Discrimination

Limited by AERO rating (NAV) for advanced rank and jobs.
Lack of equal opportunity for NAVS to achieve command of operation flying units.

Job discrimination because of being a navigator.
Being a navigator in a "pilots'" Air Force
Status of navigators when competing for promotions, jobs, assignments, etc.

10. Incompetent People

Incompetence in visible positions; i.e., CBPO, MAC terminals, SP, etc. due to poor leadership.
Promotion of mediocrity with inflated ratings.

11. PME

Requirement to attend Mickey Mouse PME courses; i.e., AWC. Give me an opportunity to solve major AF problems at PME and not study ancient history.
The grading system at AWC.

12. Long Hours

No responses as a number 1 factor.

13. No Number 3.

Obviously, no response as a number 1 factor.

14. Too Early Retirement

Having to look for 2nd career at advanced age.

15. Non-professionalism

Lack of professionalism.
Non-professionalism.

16. No Number 2

Obviously, no response as a number 2 factor.

17. Civilian Leadership

No responses as a number 1 factor.

18. Non-monetary Compensation

Compensation, over and above money, does not increase commensurate with rank and responsibility; i.e., some officers don't go to head of the line like they did in the "brown-shoe" days. Bust your tail 10 hours a day as an L/C so you can work 12-14 hours as a colonel.

20. No Number 1

No number 1 response.

21. Spouse Requirements

No responses as a number 1 factor.

WRITTEN RESPONSES TO QUESTION 191--THREE MOST NEGATIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 2 FACTOR

1A. Inadequate Pay and Allowances

Pay. (8)
Lack of adequate pay and allowances.
Erosion of pay and benefits--including encroachment of commissary and BX prices by private sector.
Low pay. (3)
Inadequate compensation (TDY pay, rent-a-car use, office space and furnishings, basic pay and allowances, moving compensation, compensation for 50, 60, 70 hour weeks).
Low pay compared to same skill in civilian community and excessive family separation.
Inadequate compensation vis-a-vis civilians.
Inequitable workloads and hours for which compensatory benefits are not received.
Pay and allowances along with eroded benefits.
Low pay especially for enlisted force.
Inadequate pay and privileges for senior officers and senior enlisted.
Inadequate pay and benefits.
Lack of adequate compensation.
Inadequate pay.
Compensation is not adequate for demands and responsibility.
Fulfilling family financial obligations.

1B. Eroding Benefits

Erosion of benefits (medical, rank privileges, BX, commissary benefits are marginal).
Uncertainty of retirement benefits.
Benefits.
Inadequate family medical attention.
Medical and dental for dependents.
Poor medical service.
Deterioration of real benefits--medical benefits, commissary, etc.
Poor medical care.
Space available only medical/dental care for retirees.
Erosion of benefits.

1C. Moving Costs

Cost of overseas move (loss of equity in a house, etc.)
Disadvantages faced in local markets (housing, etc.) due to constant movement.

2A. Management Related

Guidance from senior officers to their Hq. staffs, in many instances, needs to be better defined. There are not enough people to work the wrong problem.
Lack of integrity.
Some areas of Air Force management.
Over-politicization.
Too much time devoted to crisis management and not enough planning for the future.
An absence of foresight and disregard for innovative thinking.
Micro-management from the macro-level--hire me, train me, select me for a key job and turn me loose. Trust me!
Having to work for and with marginally competent senior officers who are either cheap bastards, lacking in professional integrity or are promoted to O-6 despite their total lack of attention to detail and preparation.
Too many layers of bureacracy (NAF, etc.)
Centralized management.
Micro-management.
Management mindset vice leadership.
Lack of flexibility on the part of leaders and management to reward and promote truly outstanding performers and place them in responsible positions.
Over centralization of management.
Reluctance of leadership to delegate authority.
High levels of responsibility without commensurate authority.
Frustrations of dealing with system/bureacracy.
"Make work" to answer "what ifs."

2B. Leadership Related

Aggrandized leadership.
Leadership.
Quality of leadership--excessive self-centeredness.
Leadership by default (oldest).

2C. Policy Related

Performance rating system.
Up-or-out.
Do more with less as manning goes down and job stays constant or expands.
Lack of a comprehensive, organized and responsive Air Force personnel program.

3A. Instability

Uprooting the family so often.
Family separation.(4)
Instability of family life.
Family hardships (PCS's, separations, schools).
Family disruptions.
Family inconvenience.
Moving family with children in later high school years.
Heavy personal requirements.
Lack of family stability roots.

3B. Moving

Numerous PCS. (2)
Frequent moves.
Moving.
Strain on family during moves.
Stability of assignments.
Too frequent moves.
Moving too much.
Frequent PCS moves.

4. No Control Over Assignments

Lack of real control over assignments.
Uncertainty in assignments.
Frequent impossibility of matching personal desires with AF needs.
Lack of control over destiny--assignments, where you live, promotions.
Little career control.
Assignment limitations (as career progresses).
Concern for personnel desires.
Inadequate consideration of my personal/family concerns in the assignment process.
Too much staff duty.
Fragmented career management philosophy.
Future uncertainty.
Lack of influence over assignments.
Insensitivity to family with assignments.
Remote tours.
Assignment instability.
Ability to influence future assignments.

5. Promotion/Advancement

Lack of opportunities rated-vs-non-rated.
To be promoted it requires a turbulent PCS environment.
Promotion system. (2)
OER/promotion concerns.
People who try to do everything except what Uncle Sam pays them to do to get promoted--education, PME, boot licker, etc..
Promotion prejudice.
Lack of promotion opportunity beyond O-6 for non-rated officers.

6. Lack of Prestige/Appreciation

Prestige.
Treatment.
Low prestige.
Lack of public esteem for military. (2)
Lack of public support.
Inadequate recognition/respect for military professionals by society.
Societal View.

7. Resource Deficiencies

Poorly equipped and maintained: equipment and facilities
Lack of resources to complete mission (people, flying, time, etc.).
Not enough flying time for our jocks to have the proficiency they want to have.
Inability to complete/accomplish needed improvements.
Poor working conditions.
Lack of adequate funding to accomplish mission properly.
Lack of adequate resources for proper training.
Lack of resources to do the job.

8. The Job

Large number of meaningless jobs.
Stagnation.

9. Navigator Discrimination

No response as a number 2 factor.

10. Incompetent People

A weak, ineffective boss.

11. PME

No response as a number 2 factor.

12. Long Hours

Hours.
Unreasonable work demands.
Long hours.
Work schedules.

13. No Number 3

Obviously, no response as a number 2 factor.

14. Too Early Retirement

Starting second career.
Necessity of starting second career at middle age.

15. Non-professionalism

No response as a number 2 factor.

16. No Number 2

No number 2 negative factor. (3)

17. Civilian Leadership

Civilian employees throughout DOD.
Lack of Presidential support.

18. Non-monetary compensation

No response as a number 2 factor.

19. Inequality in the Workforce

Ne response as a number 2 factor.

20. No Number 1

Obviously, no response as a number 2 factor.

21. Spouse Requirements

No response as a number 2 factor.

WRITTEN RESPONSES TO QUESTION 191--THREE MOST NEGATIVE FACTORS IN AN AIR FORCE CAREER

NUMBER 3 FACTOR

1A. Inadequate Pay and Allowances

Unequal work for equal pay.
Always feeling overworked and underpayed.
Pay, benefits.
Money.
Compensation.
Loss of purchasing power due to inflation.
Monetary compensation.
Low Pay. (2)
Salary plus eroding of benefits.
Compensation well below civilian for education and experience.
Pay and benefits. (2)
Poor pay for responsibility.
Pay. (5)
Compensation in certain skills compared to those in civilian community.
Pay insufficient for the dedication and hard work required to do the job right-the first time.
Inadequate financial rewards.
Inadequate pay, benefits and courtesies for senior officers.
Compensation relative to civilian sector equivalents.
Lack of commensurate pay (for work/responsibility).

1B. Eroding Benefits

Increasing difficulty in providing for retirement home.
Declining quality of medical and dental benefits and services.
Dwindling benefits.
Erosion of prestige and benefits.
Instability of military perks over a period of time to fiscal scrutiny by civilian sector.
Consistant erosion of benefits.
Up until the last year or two the constant press by OMB, GAO, Congress and some in the DOD to eliminate BXs, commissaries and the poor press based on little evidence of any impropriety.
Loss of benefits.
Lack of dental benefits and GI Bill.
Housing
Insidious erosion of benefits.
Benefits touted but not available; i.e., medicare for dependents, etc..
Erosion of benefits.

1C. Moving Costs

PCS moves (in today's economy, selling house, etc.).
Moving expenses.
Cost of housing market--moves.
Expenses for PCS moves (financial disaster)(move, housing, rentals, etc.)
Inadequate travel allowance.
I hate to move, not the change of location but the hassle and cost of going from A to B. We can make that easier--pay what it costs; i.e., house hunting trips, etc..

2A. Management Related

Centralization
Managerial distrust of people.
Need much more buck stop--lower the responsibility.
Careerism.
Terrible senior management.
Micromanagement by HHQ.
Fuzzy management practices.
Incompetent senior leadership.
Senior management.
Managers and supervisors with their heads in the sand about the mission of the Air Force to Fly and Fight. Only want to do what's good for them.
Micromanagement.
Perception of higher management that more hours on the job equates to a significantly higher degree of accomplishment.
Leaders who won't tell superiors no; i.e., can do without.
The perception that senior officers do not have the authority to make necessary changes in force structure and management.

2B. Leadership Related

Confused leadership.
Square-filler commanders with no concern for mission or people.
Poor leadership.

2C. Policy Related

Contending with illogical programs; e.g., affirmative action.
An impersonal personnel system.
Poor, inconsistent policies.
Having to keep doing more with less.
Elimination of "soldiering" from the Air Force.
Congressional juggling of retirement and pay scales.
Inflated rating system.
Up or out system.
Insecurity resulting from "up or out" system.
Changes in the rules; i.e., retirement, etc..
Rating system.

3A. Family Disruption/Separation

Family Separation. (4)
Great deal of family sacrifice.
Family hardships from PCS/TDY.
Family separation of PCS moves.
Time away from family.
Family stress.
Inability to take root and settle down before retirement
Incompatibilities between AF career and family stability needs
--especially for career working spouses and children with special education needs or desires.
Family considerations.

3B. Moving

Moving
Frequent PCSs
Lack of roots to community
Continual moving.
Frequency of moves.

4. No Control Over Assignments

Assignment policies.
Assignments.
Assignment policies not flexible enough to accomodate the family members and their desires.
Aircraft assignment policies.
Control over assignment opportunities.
Knowing that I'm headed for Washington D.C..
The requirement for overseas duty.
Lack of control over future.
Lack of control over assignments.
Assignment planning/family separation.

5. Promotion/Advancement

Limited opportunity for promotion that is commensurate with ability.
Failure to truly recognize outstanding dedication and work.
Increasing politicization of promotion process at higher grade levels.
People gaming system to get ahead.
Too many squares to fill--PME, education.

6. Lack of Prestige/Appreciation

Lack of public support for military. (2)
Lack of respect by civilians.
Public attitude.
Being used by political civilian opportunists as a scapegoat in attempts to incluence policy or create social change.
Public concept of military career.

Lack of civilian appreciation.
Lack of appreciation from society.
Lack of public respect and appreciation.
Lack of Congress support.
Lack of adequate status symbols (externals).

7. Resource Deficiencies

Inadequate resources to do the job.

8. The Job

Job satisfaction.
Match responsibility and capability.
Meaningful employment.

9. Navigator Discrimination

No response as a number 3 factor.

10. Incompetent People

The difficulty of getting rid of people who can't or won't perform.
Promulgation of mediocrity.
Lack of committment to mission.

11. PME

PME.
AWC (Evaluation system in particular.).
PME that continues to treat adults as children!
Being treated the way I was as a Lt or Capt, especially in Air Force schools.

12. Long Hours

No response as a number 3 factor.

13. No Number 3

No Number 3 as a negative factor. (8)

14. Too Early Retirement

No response as a number 3 factor.

15. Non-professionalism

No response as a number 3 factor.

16. No Number 2

Obviously, no response as a number 3 factor.

17. Civilian Leadership

No response as a number 3 factor.

18. Non-monetary compensation

No response as a number 3 factor.

19. Inequality in the Workforce

Inadequate recognition for support personnel.
Disparity in image of rated-vs-non rated officers.
Failure to improve the quality of life for enlisted troops.

20. No Number 1

Obviously, response as a number 3 factor.

21. Spouse Requirements

Some situational ethics; i.e., Navs can be Sq/CC, yet that's not really true; most Sq and Wg/CCs must be married; more emphasis put on wives being involved in social functions and not recognizing the ongoing social revolution.
OWC, and the politics required to promote husband.

APPENDIX K

MOST IMPORTANT ISSUE

WRITTEN RESPONSES TO QUESTION 192--THE SINGLE MOST IMPORTANT ISSUE FACING THE AIR FORCE TODAY

1. Retention

Making sure we have quality people.
Recruitment and retention of high quality people (6).
Retention - particularly second term enlisted people.
Retention (23).
Retention of engineers.
Retention of best people (6).
Retention of career airmen to adequately support existing weapons systems.
How to attract and retain qualified people and use them to their maximum effectiveness--women included
Retention of quality people with the recent experience to fly and lead the troops.
Retention of skilled/experienced work force (5).
Retention of highly qualified officers and airmen (4).
Retention of NCOs and mid-grade (7-10 yr) officers (3).
Poor recruitment (we are not getting the good people) and disastrous retention. Lets take a look at universal service and a GI Bill.
Retention of decent personnel.
People.
Retention of mid-level NCOs (2).
Retention, recruitment and general quality of the force.
Maintaining a force of trained, qualified, motivated personnel.
Retention of quality people especially young officers and airmen (2).
Retention, Retention, Retention of good professional military soldiers. Need a system that dumps the "do-gooders;" i.e., PME bums and professional students that won't work but think they are so highly qualified.
Retention of quality people in critical skills (engineering, medical) .
Retention of the right quality people for the right reasons; i.e., to serve AF not their personal advancement.
Retention of professional people.
Retention of the right people, both senior officers and senior NCOs .
Recruiting, training, utilization and retention of quality personnel.
Retention of experienced middle managers.
Retention--not just pilots (they are highly visible) but qualified people across the board.

2. Readiness Deficiencies

Readiness (4).
Objectives and purposes.
Lack of readiness to fight which is the primary mission of the USAF.
Acquiring a combat capability that will contribute to our country reacquiring credibility as the leader of the free world.
That issue is identical to that faced by other military services--whether or not "defense" is worth the price the U.S. public must pay over the next two decades to buy "insurance" for U.S. lifestyle.
Lack of national purpose and commitment to support the military personnel and equipment necessary to meet the threat.
Unwillingness of the citizenry to adequately support the military with sufficient quality people and money posed against the high proportion of the budget that a good AF costs.
How to rebuild the nation's military strength.
Convincing the public and Congress to maintain an adequate defense.
Necessity of having a strong military.
Preparedness for war.
Inability to carry out the mission of national defense because of past political mistakes and the need to rebuild to meet the challenge.
Decreasing strength relative to USSR.
Being able to counter the known threat.
Continuing viability.
Combat readiness--i.e., the aggregate ability of all USAF resources (personnel, equipment, doctrine, etc) to meet and defeat the Soviet threat, when employed in concert with other U.S. and Allied forces.
Acquiring and maintaining an adequate AF for its mission.
Readiness/sustainability.
Insure we have the means of preserving the American society.
Building and maintaining a fighting force of sufficient size and quality.
Preparing for war against a stronger opponent.

3. Leadership/Management Deficiences

Lack of quality leadership.
The proliferation of Hqs and Staffs. We have more pilots "managing" than we have pushing throttles by some margin. The younger pilots see little future for themselves except as "paper-pushers."
Lack of guts in senior leaderhsip. Politics and desired personal achievement overshadow telling it like it is.
We don't have enough people in leadership positions--Sq/CC and above--who are willing to disregard the political nature of the system. Too many are concerned about their own personal goals and not the mission/people.

Leadership and management.
Developing leaders, not micromanagers.
Inability to manage with integrity; leadership too politically inclined.
Bureacracy of leadership.
How to do away with the vast number of strap hangers making life impossible for the few workers in the wings that make the AF go.
Maintaining a sense of dedication, professionalism and urgency within the service in a time where this is not particularly in vogue within the country
Loss of professional identity.
Pampering to selfishness rather than appealing to patriotism.
Rising expectations of people with the idea--what's in it for me.
The need for a greater sense of duty and commitment in its people. The need for the AF to be considered more than just a job.
Quality of personnel.
Esprit de corps (2).
Motivation.
We need to focus the attention of all our people on the mission of the Air Force, emphasizing each individual's part in that mission.
Improving its image to Congress, the American people and itself to provide self-esteem necessary to maintain professionalism and retention in its personnel.

4. Resource Deficiencies

Lack of adequate $ support from Congress.
Dollar crunch.
Provision for adequate resources ($, systems, personnel).
Money for equipment and people.
How to buy quality people and equipment with limited budgets.
Lack of resources to do job properly.
How to optimize the use and expenditure of limited funds appropriated by Congress.
Inability of aligning mission requirements with capability.
Weapon acquisition.
Making progress in people programs, compensation, hardware, facilities, forces under fiscal constraints.
Materiel support of aircraft--(people and parts).
Lack of sufficient resources to perform mission and maintain a quality force.
Quality of life for its personnel--all money (O & M) goes to mission related items, not to improving our facilities, recreational activities, etc.
Having enough money, materiel and manpower to do the job.
Lack of adequate funding to accomplish mission properly.
Doing more with less.
Maintaining a quality force in the face of budgetary constraints.
Lack of resources to adequately train and function under sustained combat.

5. Compensation

Compensation.
Pay (2).
Equal pay versus the civilian market
Inadequate pay.

6. Miscellaneous

Lack of conern for singles; i.e., quarters, job opportunities, pay differences for marrieds.

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